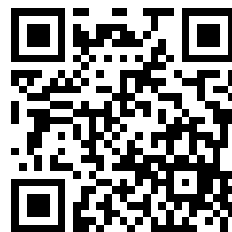
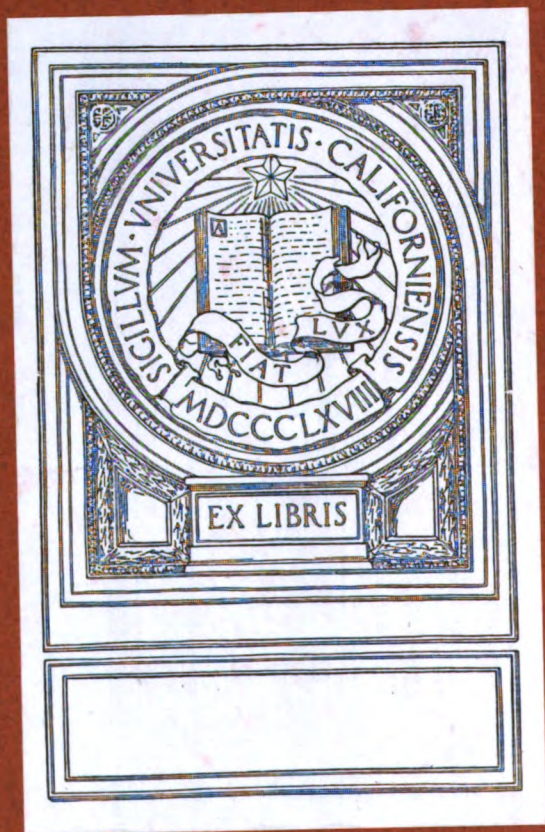

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THE UNIV OF CALIFORNIA CAVALRY JOURNAL

JANUARY 1909

THE TRAINING OF TERRITORIAL HORSE ARTILLERY

By CAPTAIN HON. G. F. STANLEY, R.A., *Adjutant of the
Hon. Artillery Company of London*

At this time, when the Territorial Army is emerging from its first struggle for existence, and most, if not all, of the Territorial Horse Artillery batteries that are to be raised have been recognised as having enlisted 80 per cent. of their establishment, it may be of interest, and possibly of assistance, to those directly or indirectly interested, to give a short account of the methods of training that have been found to give the best results in the Honourable Artillery Company—up till now the only Horse Artillery the Auxiliary Forces possessed.

It must be kept in mind that the Honourable Artillery Company has had exceptional advantages, not the least of which is the fact that the two batteries have been raised for some years and have been working all that time gradually to attain a state of efficiency (which is believed to be admitted), without the fierce glare of publicity that the newly raised batteries have to encounter. They have other advantages such as their Headquarters which help them greatly, and it may be said that, for

other batteries not having those advantages, the training must be differently carried out. To a certain extent this may be so, but the methods of training adopted by the Honourable Artillery Company may possibly assist Adjutants of newly raised batteries and others who may be concerned.

The first point that one has to consider is the question of officers. The personnel and drill of a battery may be excellent, and yet the whole work of the year may, on the practice-ground, be rendered absolutely abortive if the officers are not up to the mark. The procedure for the selection of officers in the Honourable Artillery Company cannot be taken as the example for other batteries to follow, for the following reason. The Honourable Artillery Company, officers, non-commissioned officers and men, is composed almost entirely of the class from which officers of the Auxiliary Forces were obtained in the past and will be in the future. It follows, then, that with so many to choose from, none but the best need be selected. Every officer in the corps has been through the ranks, and no one is promoted to a commission unless he has shown aptitude for command. The value of this to the batteries cannot be overestimated, as all the lower ranks have confidence in their officers.

When a man is promoted to a commission, it is essential that he should get as much practice as possible in command. The more chance he gets in his own drill hall of becoming accustomed to hearing his own voice giving orders, the better will probably be his command when actually drilling with his battery in the field. In order to give all officers, and especially the younger ones, as many opportunities as possible of commanding, the Adjutant should never take command at drill. He should superintend and criticise and also correct any mistakes, but he should never take actual command.

Every officer on first appointment is obliged by regulation to be attached, as soon as possible, to a Regular Horse Artillery battery for one month—and a most marked improvement this makes in the young officer, especially if he is attached during

the drill season at Aldershot, where he has every opportunity of learning anything that can be useful to him. He, of course, can and does learn the drill and interior economy of a battery at any other station, but Aldershot seems to give better results, as there he has opportunities of seeing Horse Artillery acting in its proper rôle.

To turn to the question of non-commissioned officers. In this particular, the procedure adopted with the Honourable Artillery Company may or may not be a suitable one for other batteries—possibly not—but it has been found to work well, and is therefore mentioned in case other Adjutants may think it worth trying.

The selection of anyone for first appointment to N.C.O.'s rank in an auxiliary battery must involve a considerable amount of 'chancing it.' A man who knows his work most admirably, either as gunner or driver or both (for many members of the Honourable Artillery Company are equally at home either as gunners or drivers), may be found not only utterly useless when appointed acting Bombardier, but not likely ever to make an efficient N.C.O., and for the officer commanding a battery to know how any man will fill the position when promoted is an impossibility, until he has been promoted and tried in that position.

It may be as well to remark here that the proper person to select any new N.C.O.s, and to decide on their subsequent promotion, is the Battery Commander; the latter would, most probably, if he really had the best interests of his battery at heart, discuss any promotions with his Adjutant; but he is by no means bound to do so, and, being responsible for the efficiency of his battery, he must naturally be allowed to select his own non-commissioned officers. The Adjutant should, however, be most particular in bringing to the notice of the Battery Commander any point that might affect, in any way, the promotion of any individual. It must never be forgotten that, once a man is promoted, it is a very unpleasant duty to have to pass him over

or tell him that he must revert to the ranks ; so, even if it were for this reason only, the very greatest care should be taken to select only those who, as far as one can tell, are likely to do good and useful work in their new rank. If, however, a man who has been promoted does not or cannot do his work satisfactorily there must be no half measures—he must be told to revert. Again, it is no use promoting to a higher rank a man who has not done well in a lower one, on the off chance that he may do better. It is far wiser to either pass him over or make him revert to the ranks. This is the system in the Honourable Artillery Company, and it has been found to work well—so well, indeed, that it has happened more than once that a Sergeant, finding that he was unable to give sufficient time to his work as such, and that the efficiency of his subsection was likely to suffer, has voluntarily resigned his stripes and has taken part subsequently in drills as a gunner, giving most loyal support to the Number 1 of the subsection who was formerly junior to him. Whether such can be the case with the new batteries remains to be seen, but there seems no reason why, given the right and proper spirit, it should not be as successful with them as it has been with the H.A.C.

We have dealt, so far, mostly with first appointments with incidental remarks as to higher ranks, and we now come to the question of promotion to Corporal or Sergeant, when the difficulties of settling the question as to whether to promote or not are in one way increased and in another diminished. They are increased in this way, that, when a man has risen to be senior Bombardier or Corporal, it is exceedingly difficult and unpleasant to have to tell him that he is not fit for further promotion. On the other hand, the difficulties are diminished because he has probably been for some time in his present rank, and so one has had time to observe how he shapes and to judge accordingly. By the new regulations it is laid down that a man, before promotion to Sergeant, must go through a certain course, but it also applies that, even though the man may have been through

the required qualifying course, he must be passed over if not suitable for promotion.

A skill-at-arms competition, held annually by the H.A.C., helps greatly to decide, and the competition is so useful that a detailed description of it is given.

The competition consists of

- (1) Drill examination (including laying and fuze-setting).
- (2) Written examination.

All except the laying examination (which is held in camp) is done about one month before the battery proceeds to camp.

In (1) the Adjutant examines the N.C.O.s who enter for the competition in drilling a squad at gun and marching drill, special attention being paid to word of command, accuracy, and probable capacity for imparting instruction to recruits. The gunners who submit themselves for examination are marked according to the way they perform their duties in the detachment. The fuze-setting examination is held on the same evening as the drill examination, and is conducted according to the regulations laid down in 'Instructions for Practice.'

In (2), which takes place the next evening, a paper is set by the Adjutant not only on gun drill and manœuvre, but also on broad questions that are clearly set forth as important in Field Artillery Training. This paper can, of course, be modified as required, but there is no doubt that the paper set annually to the H.A.C. requires a very considerable general knowledge. All up to, and including, Sergeants are allowed to compete, and *no one is noted for promotion from the ranks to N.C.O. nor is any N.C.O. noted for further promotion unless he has been in for the competition that year.* The reason for this regulation is obvious, but it is equally obvious that the converse need not apply. Promotion is not necessarily given to any man *because* he has competed in any one year; in fact, there have been cases where the examination has shown as utterly unfit for promotion a man who had previously been rather marked out for it by apparent general smartness and intelligence.

Although the promotion from Acting-bombardier to Bombardier generally goes by seniority, it is not so in the case of promotion to Corporal or Sergeant. In both these cases it must be done by selection, and, although it may, at times, cause a certain amount of soreness, it must be done thus if the efficiency of the battery is not to suffer. The following is not quite so important when promoting a man to Corporal; but, when promoting to Sergeant, one must not only consider whether he is a good drill but also whether he is likely to be able to keep his subsection up to the mark. It must never be forgotten that a man in the Territorial Force takes up soldiering seriously, but it is in addition to and does not constitute his regular profession. It stands to reason then, that, unless treated properly, he will do no more than he is compelled by regulations to do—and that is not sufficient to turn out a gunner or driver trained as one would like him to be. Consequently, much must be left to the Numbers 1 of subsections to induce their men to turn up to drills as often as possible, and a Sergeant who is not thoroughly in touch with his men, or who does not know his drill in such a way that they have thorough confidence in him will never have a good subsection. Men naturally have a most rooted objection to belonging to a subsection which is below the standard of others.

The selection of the Battery Sergeant-major is not so difficult. He must, of course, have a thorough knowledge of his drill and be able to exert his authority, but he really has little to do with the batteries except to transmit orders from the C.O. to the Numbers 1, and to keep in touch with them, except in camp, where he becomes the same as the Sergeant-major of a Regular battery. It may generally be taken that the proper man to promote to Battery Sergeant-major, when a vacancy occurs, is the senior Sergeant of the battery.

The Battery Quartermaster-sergeant presents a difficulty, and it is rather impossible to say anything that may be helpful in the matter. He is not likely to be able to devote the proper

time to the regular duties of a B.Q.M.S., whose work is practically entirely in the office, and such things as the keeping of the equipment ledger, &c., are best done in peace time by the permanent staff. He should, however, be taught the work properly, as, when called on service, the battery takes no permanent staff and all such work must be done by him.

Range-takers and signallers, &c., are probably found easily with a little trouble. There are, generally, some men who are quite willing to take up such duties and who will work very hard to attain a high standard of excellence. The question of artificers is a very difficult one. No battery can possibly be considered in any way efficient without them, but they are not easy to find. The H.A.C. is very fortunate in having its full complement of artificers who, though business men, have in their spare time gone through regular courses and learnt the work of farriers, saddlers, wheelers, &c. Possibly in the ranks of the new batteries will be found men who follow one or other of these trades in civil life. If so, one of the most difficult problems that a battery has to contend with will be satisfactorily solved.

So far we have only dealt with the actual personnel of the battery. We must now come to the question of drill and instruction. The methods followed by the H.A.C. may not be suitable for other batteries, but are given here in case they may help.

As there are two batteries, both trained at the same place, the time is divided up as follows :—

On Monday there is a parade for both batteries. They are formed up independently, and the gunners are then put to do standing gun-drill, fuze-setting, practice in setting sights and in laying for elevation with the clinometer, all of which can perfectly be done in the gun-park or drill-hall. The drivers are practised in putting harness together, in fitting it, and in harnessing up a dummy horse. (This latter is most useful, and any battery would be well advised in getting one.)

On Tuesday one battery has its fire-discipline parade, the other has a similar parade on Wednesday. At first it would seem quite impossible to have four guns in a drill-hall, but, as a matter of fact, it can easily be done. There is, of course, no question of moving the guns once they are in action, but the ordinary fire-discipline drill can be most satisfactorily carried out.

It should be most carefully and thoroughly impressed on all ranks of the battery how very necessary it is for all members to make a point of attending as many of these fire-discipline drills as possible. The number of drills required by regulation is very small, and, spread out as they may be during the year, will not turn out men as good at their work as one would like to have them. The *average* number of drills per man in the H.A.C. is much nearer fifty drills per annum.

On Thursday the procedure is the same as on Monday. The hours of parade must, of course, be governed by local conditions. In the H.A.C. they are from 6.30 P.M. till 7.30 P.M. So far we have only dealt with the winter months, but there is practically no difference in the work summer and winter, except that as soon as the weather gets more favourable all drills are held outside in the open space (some five acres) that the Company possesses and which is of immense assistance. There are also, as soon as possible, laying parades from 5 P.M. till 6 P.M. every Monday, Tuesday, Wednesday, and Thursday, but these, of course, cannot start until the days get longer. Men are allowed to come to this parade in plain clothes, at all others uniform is compulsory.

On Saturday afternoons, commencing about the middle of March, a certain number of mounted drills are held. The number must depend on the amount of money available, and on the facilities for horse hire.

The Royal Horse Artillery at St. John's Wood have always been more than ready to assist the H.A.C. in their training, and it is thanks to them that generally each year the following parades have been held :—

Six Driving Drills. These are mostly for recruit drivers, but old drivers are encouraged to attend, and so are young N.C.O.s, who can learn much by acting as Section Commanders and Numbers 1.

Two Detachment Drills. Drivers as well as gunners are encouraged to attend these.

In addition to the above the R.H.A. battery at St. John's Wood allots certain hours for riding drill in their riding school. Tickets are obtained by members from the orderly room, and handed over by them whenever they ride to the Riding-instructor. The tickets are then returned to the orderly room and checked there.

The R.H.A. at Aldershot have also very materially assisted of late years by turning out gun teams and detachment horses twice a year for as many as may parade. The following is the method of arranging matters :—The H.A.C. Battery Sergeant-majors find out beforehand how many of their men are going to attend ; this information is supplied to the Adjutant some days before the time appointed for the drill, and he arranges with the Adjutant R.H.A., Aldershot, for the required number of guns and horses to be turned out. There are always a few corrections to be made at the last minute, but they are done by telegram. The H.A.C. go to Aldershot by a train arriving at about 1 P.M., march to the R.H.A. barrack-square, where they find everything ready for them, and, after a short wait, march off as independent batteries to the Long Valley, where they spend the afternoon most profitably at detachment and driving drills, practising taking up positions, &c. It is extraordinary the amount of good that these drills do. They are held about the beginning or middle of May, as the batteries generally go to camp at Whitsuntide, and it is then that one realises the value of the parades that have been held. The men seem to shake down very quickly into their places, and it is greatly due to the mounted drills that have been held before the batteries go to camp.

The foregoing comprises the whole of the preliminary training of the batteries of the H.A.C. ; but, though the work is made as practical and useful as possible, largely helped by the general keenness and willingness of all ranks, still nothing does so much for the training of the battery as the annual camp ; so, were it only for this reason, every endeavour should be made to get as many men as possible to attend for, at any rate, some part of the time, even if they cannot be present for the whole. It is wonderful to watch how men sharpen and smarten up during the time they are out. Anyone who saw the battery arrive and did not see it again till a fortnight later, when it was leaving camp, would find difficulty in believing that it was the same.

Some men, with the best intentions in the world, cannot attend camp—some can only attend for part of the time—so the Adjutant must insist upon the Battery Commander sending to the orderly room, at least ten days or a fortnight before the day on which the battery goes to camp, a list showing those who cannot attend at all, and another showing those who can only attend for part of the time, together with the various reasons for non-attendance. It is necessary to have the list in so early because it has to be sent for sanction to the Mounted Brigade Commander, who alone can give leave off camp, and, by having it sent in to the orderly room some time beforehand, the Battery Commander and the Adjutant can go through the lists together, examine the reasons given for asking for leave, and see if they can be justifiably put before the Brigade Commander for a man to be excused attendance at camp. It happens sometimes that a man is prevented at the last minute from attending, so a supplementary list is necessary.

All requisitions for camp stores &c. must be sent in at least one month beforehand to the place where the battery is to encamp, and, two or three days before it entrains, a small advance party under the Battery Quartermaster-sergeant should be sent to draw the stores and pitch the camp.

Arrangements for the supply of horses are, in future, the duty

of the County Associations, and the Adjutant will send to say how many horses he requires to be at his headquarters on the day of departure for camp. The horses arrive early in the morning of the day they are required, and should have been roughly detailed beforehand by the jobmaster for the positions they are to fill. The horses are harnessed up by the men themselves, collars being fitted as well as possible. This is a constant worry, and must be most carefully done again in camp. It is most earnestly to be hoped that all Territorial Batteries will soon be issued with breast harness, which is far more suitable for hired horses, and also for men unaccustomed to handling and cleaning harness. A battery order is issued about a fortnight before, detailing the order in which sections are to march to the entraining station (in this case Nine Elms), and also the time at which each section is to start, and, about half an hour before the first section is due to go, its teams are hooked in and begin to move round the ground. It is as well to let them walk and trot round once or twice before marching off, as it is quite impossible to say how horses will go, and it is better to get through any trouble before starting than to have to undergo it when marching through streets. Sharp to the time ordered, each section marches off to the railway station, there to entrain for its camping-ground. The entraining does not generally present any difficulties, and, once in the train, the annual training may be said to be fairly commenced.

A battery order giving details as to times of departure has been mentioned above. In the same order the following, having regard to camp routine, may with advantage be published. They may seem superfluous to the Regular officer accustomed to camp life, but experience has proved that it is advisable to bring them annually to the notice of auxiliary batteries.

‘(1) *Duties.*—The battery will find daily

An orderly Officer,
An orderly Sergeant,
An orderly Bombardier.

The above are on duty from Reveille to Reveille. A stable picquet consisting of one N.C.O. and three men will be mounted daily at 6 P.M. by the orderly Officer.

‘The picquet will dismount at 6.15 A.M.

‘(2) *Tents*.—Tents, kits, &c., are to be kept clean and tidy. Tent walls will be kept rolled up during the day except in wet or inclement weather. No paper or rubbish is to be thrown about.

‘(3) *General Hours of Parade, &c.*

Reveille	5.30 A.M.
Stables	6 A.M.
Breakfast	7.15 A.M.
Boot and Saddle	8 A.M.
Squad Parade	8.45 A.M.

‘(4) *Bedding*.—N.C.O.s and men leaving camp, *even for one night only*, will personally return to store the whole of their bedding before leaving, and will draw it again on returning.’

These are only a few of the orders that should be issued before going to camp. There are others that will strike one as probably necessary, but the above are undoubtedly required.

It will be noticed that, in the hours for parade, ‘Boot and Saddle’ is ordered for 8 A.M. A close watch must be kept to see that no man starts to harness up before then, otherwise it is only natural that a man who is not so accustomed to the work as his comrades will endeavour to start long before the ordered time in order to be harnessed up as soon as they are.

The order about the bedding is given because, if it is not returned at the time when the man goes away, especially if he thinks it possible or probable he may return, it is very difficult on the last morning, when stores have to be returned, to collect all the blankets, &c. As losses, owing to inexperience, generally mount up to a pretty large amount, it is advisable to take as many precautions as possible against them.

All stores can be returned by a few men under the Battery

Quartermaster-sergeant on the day that the battery leaves camp.

Turning to the question of drill in camp, it is rather difficult to lay down any definite rules. So much depends on the state of efficiency of the battery before it goes there, that the drills must be entirely governed by those conditions. There are, however, two points, more or less matters of routine, which should be noted. The first is that all officers should attend all stable parades. It is useful to them that they should do so and it sets a good example.

The second is that though, after 'Boot and Saddle' has been sounded, the procedure is the same as in a Regular battery, there is one point to notice, and that an important one. It is obvious that men of the Territorial Artillery are not likely to be able to harness up as quickly as Regular Artillery; so, *plenty of time must be allowed between 'Boot and Saddle' and 'Squad Parade,'* otherwise things are rushed, tempers get ruffled, and the day is started badly. This may sound a very obvious and a very minor detail, but it is just the neglect of such obvious minor details that makes trouble.

The syllabus of drill (which is varied as required) as laid down for the H.A.C. is roughly as follows:—

First Day.—The battery, when ready, moves off from camp to the drill ground. It is then halted, the men dismounted and the harness thoroughly and carefully fitted (collars give a great deal of trouble, but the whole thing should not take more than an hour). After the harness is satisfactorily fitted, the officers and detachments go to detachment drill under the Battery Commander, while the Sergeant-instructor, assisted by the battery Q.M.S. and the Farrier-sergeant, takes the drivers at driving drill. This goes on the whole morning till 12 midday, when horses are watered and fed, and the men have their luncheons, which are served out to them before leaving camp. About an hour is given up to this, and then the battery drills as a whole for an hour to an hour and a half, returns to camp, goes to stables, &c.

The same procedure (except harness fitting) is followed for the first two or three days—practically only doing detachment and driving drills. It is really astonishing to see how quickly batteries get into shape, and from about the third or fourth day until the first day of practice, the Battery Commander exercises his battery in advancing under cover, taking up new positions, coming into action, and, in fact, in all the usual drill of a battery. During these days much time has generally to be spent in teaming the guns and wagons. It is unfortunate that it has to be done then, but cannot be helped, as, until one has had them out several days, nothing is known of the horses, and it sometimes happens that some horse will not go in the wheel or in the lead, that one team is very much slower than others, &c. The only thing to do is to shift them about till one gets them posted satisfactorily. Also blank ammunition must be fired a few times to get the horses accustomed to firing. It has been found in the H.A.C. that it is a useful exercise that the Adjutant should set schemes such as might be expected on the practice-ground. It gives the Battery Commander some system to go on, and makes the drill more interesting to all ranks of the battery if they know what the general idea is, and if it is explained, as it should be, with the map to all N.C.O.s and acting numbers as well as to officers before moving off to carry out the scheme. The good effects of this are very noticeable when the battery gets on to the practice-ground. We come then to the actual practice, at which it is the aim and object of all ranks to obtain a first class, and all the work and drill of the year having been for that end, one can only hope for fine weather, luck with the targets, and that the coveted first class may be the reward of a year's good work.

A few words as to prizes. Conditions vary so much that no definite principles can be laid down as to how the prize-money is to be apportioned. It will probably be with other batteries the same as it is with the H.A.C., that it is not the value (which is small) that counts so much as the honour of receiving a prize at the annual Regimental Prize Distribution. A list of prizes

as given in the H.A.C. may be of some slight assistance, and is as follows :—

Skill-at-arms competition (details mentioned before), 1st, 2nd, and 3rd prize.

Laying prizes ; 8 prizes (all equal).

Fuze-setting ; 6 prizes (all equal).

Written examination in skill-at-arms competition ; 1st prize, (given by Adjutant), 2nd prize.

Drill examination in skill-at-arms competition ; 1st prize, 2nd prize.

Drivers' prizes ; 5 prizes, 1st, 2nd, 3rd, and 4th prize, and one prize for recruit drivers of less than one year's service.

In addition to the prizes there are a certain number of challenge cups for competition between the two batteries, but, as all other Horse Artillery batteries are to be raised singly, most of these competitions would be impossible. There is one, however, that is held in camp between the two batteries of the Honourable Artillery Company that might equally well be held between sections of a battery, and which is very useful. It is a competition as to which battery (or section, as it would be in the new batteries) can harness up and move off complete from the lines in the quickest time. It should be held towards the end of the time in camp, when men have had some practice in harnessing up.

The way to carry out the competition would be for the section Commanders to arrange, the evening before, how many men and horses they will each turn out. There will be the same number of guns and wagons in each section, and the only thing to arrange is to have an equal number in detachments and *serre-file*. The next morning, all horses and men not required for the competition are moved away from the lines before the start. A very strict rule is that no one may help anyone else, except that gunners may hook in, and only those men who are actually in the competition are allowed to do anything. The team horses may have their collars put on beforehand. Everything being ready for a start, the Adjutant either blows his whistle, or, better still, makes the trumpeter sound one 'G.' The time is taken from that moment, and it is very noticeable, if one watches

carefully, how the quiet methodical man comes to the front. The man who attacks his work helter-skelter probably puts something or other on wrong and has to change it, while the quiet man sets about it as if there was nothing unusual happening, and is generally ready before the other. As soon as each subsection is ready hooked in, the Number 1 mounts his men, and informs the Section Commander. When the whole section is ready it is moved off about 20 yards by the Section Commander. The time counts till the section moves off, and if, as sometimes happens, one man is left behind, the time counts until he has moved off. After both sections have advanced, the Adjutant inspects each man and horse to see they are properly turned out, and marks accordingly. As the numbers turned out by each section are the same, it is simpler to deduct points when necessary instead of giving so many marks to each individual. The way to mark for time is that the first section to move off is marked 0, and the last section loses one point for every five seconds or part of five seconds longer that it takes before moving off. Suppose the right section to be the first to move off, and the left section to be 2 minutes 15 seconds longer. The right section would be 0, and the left would be -27 points. Suppose also that, on inspection of the turn-out, the right section loses 60 points and the left section 50. The result would be that the right section would have lost a total of 60 points and the left 77. The right section would therefore have won by 17 points. Such a competition does a great deal of good, and the friendly rivalry between batteries is very healthy, and no doubt would be equally so between sections.

A few words to Adjutants on points that may be useful. Arrangements for camp can never be made too early. If they are left too late they have to be hurried, new points are continually cropping up, and things never get satisfactorily settled. Modifications of orders are easily made, additions are difficult.

Also do not be downhearted if, when a parade, such as detachment or driving drill, is ordered, you find very few men

present. It is natural to be disappointed, but the probability is that there is some very good reason for a poor attendance on that particular date, and the next time you have such a parade there will be an extra-large muster. Your biggest worry of the year is whether there will be enough drivers in camp to turn out the guns and wagons. One can only hope for the best, and do one's utmost to get the men down to camp. If once a spirit of enthusiasm can be stimulated in the battery, men will think nothing too dull or too difficult if it can in any way conduce to the efficiency of the battery. If by any chance a friendly spirit of rivalry can be fostered between any two batteries raised in different places it would be a great help.

In conclusion, it can only be hoped that these few notes on points that have been found useful in the H.A.C. may be of assistance to those who have undertaken to raise the new batteries of the Territorial Force.

*FATHERS OF THE INDIAN CAVALRY**LIEUT.-GENERAL SIR JOHN HEARSEY*

As the British Empire in India was gradually consolidated, the small local forces in the three Presidencies of Bengal, Madras, and Bombay grew step by step into regular armies. In the early days of these armies the Infantry largely predominated, the Artillery being weak both numerically and in weight of metal, while the Cavalry was chiefly irregular. It was this fact that made room in the Company's service for men like James Skinner and William Gardner, whose careers have already been sketched in the *CAVALRY JOURNAL*, but the large reductions which took place at the end of Lord Lake's Maratha War (1803-6) almost swept the Indian irregular Cavalry out of existence, and that arm remained principally regular until the Mutiny of 1857.

Perhaps the best known officer of the regular Indian Cavalry was Sir John Hearsey, who was born in Bengal in the year 1793, the son of Lieut.-Colonel Andrew Hearsey, a distinguished soldier of that Presidency, who had served in many campaigns before his death in 1798. Left fatherless and poor, John Hearsey returned to India as a Cavalry cadet at the age of thirteen, and passed, with high distinction, through Lord Wellesley's College at Baraset, near Calcutta, receiving a sword of honour and a pecuniary reward. Hearsey joined the 8th Light Cavalry at Muttra in 1809, before his sixteenth birthday, and was soon broken to the active duties of his profession. As may be seen in his autobiography,¹ British India in 1809 was incessantly harassed by the Pindaris, the wild and turbulent outlaws of

¹ See *The Hearseys*, published by Messrs. Blackwood & Sons.



LIEUT.-GENERAL
SIR JOHN BENNET HEARSEY, K.C.B.,
In the Uniform of the 2nd Bengal Irregular Cavalry.

TO VIND
ALBERTUS

Hindustan, who had attached themselves to the Maratha States, and was threatened also with war by the powerful rulers of that nation. The 8th Cavalry were, in consequence, almost constantly in the field during the first six years of Hearsey's service, passing every hot weather under canvas for the protection of some threatened portion of the Company's dominions or that of its allies. This life, though offering but few chances of distinction, made hard and practised soldiers of those English officers who survived its hardships. Among them was young Hearsey, who, in the autumn of 1814, was a perfect type of a Cavalry soldier, tall, light and lathy in figure, a finished horseman, beloved and trusted by his men, with whose languages and ideas he was thoroughly acquainted. Hearsey at this time was selected for the command of 150 troopers of Gardner's Horse which formed part of the escort of his brother-in-law, Major Bradshaw, an assistant to the Resident at Lucknow, and temporarily in charge of the Oudh frontier.

The Gurkhas of Nepal had for some time encroached on the territory of Oudh and of other States under the Company's protection, and, after the exhibition of great patience, Lord Moira, the Governor-General, finding that war was inevitable, prepared to drive the invaders back within their own border, and placed four columns of considerable strength in the field.

Pending the arrival on the frontier of these forces, the scanty British troops in Oudh, as usual at the opening of our wars, suffered several reverses, and, indeed, narrowly escaped annihilation. Major Bradshaw, a forgotten worthy, handled his few troops with boldness and skill, and nearly succeeded in clearing the Oudh frontier. Three or four Cavalry actions took place, in which Hearsey, now twenty-one years old, highly distinguished himself by his skill and daring, taking a prominent part in the complete destruction of a small detached force of Gurkhas who had rashly crossed the Baramati river. Hearsey cut off their retreat, destroyed their boats, and but few of them escaped by swimming. This happened in October 1814, and if Major

Bradshaw had been promptly re-inforced all the Gurkhas in the Oudh Terai might have been destroyed or captured, but the opportunity was lost through the supineness of a British General, who was subsequently recalled by Lord Moira. Instead of success disaster followed, for Bradshaw's scattered outposts, being neither withdrawn nor strengthened, as he had advised, were surprised and defeated by the Gurkhas in January 1815. Hearsey with his few troopers rescued some of the wounded and brought in the bodies of the English officers who had been killed. A month later, at a place called Pirazi, Hearsey again had an opportunity, which he promptly seized. The outposts of the column commanded by the incompetent commander already mentioned were suddenly attacked, and Hearsey and his troopers were despatched to the rescue. Hearsey found the Gurkhas pressing their attack in a tumultuous mass, and at once charged them. His first attack was foiled by marshy ground, but, quickly recovering he charged again with great effect. He then drew off about thirty of his men and placed them so as to cut off the enemy's retreat, the Infantry by now having re-inforced the British outposts. On the Gurkhas, about 500 in number, approaching him, Hearsey fearlessly charged them, but his troopers sheered off and attacked the Gurkhas in flank. Hearsey himself was only followed by one man, a standard-bearer named Dilawar Khan. Each received three wounds, and their lives were saved by sheer hard fighting and skill-at-arms. For this gallant action Hearsey was thanked in General Orders, and Dilawar Khan was promoted to the rank of Dafadar-Major. The Gurkhas were so impressed by the effective action of Hearsey's small body of men in these actions that they fought no more in the open, and the war soon afterwards passed into their own mountainous and roadless country, where Cavalry could not be employed. Hearsey, however, had made his name, and in July 1815 was appointed Adjutant of the 6th Light Cavalry by order of Lord Moira, 'in consideration of his recent and gallant services on the Nepal frontier.'

A further opportunity of distinction quickly came, for in 1816 the Pindari War began by an invasion of British territory by 23,000 of those marauders, and the consequent operations culminated in the Maratha War of the following year. After various preliminaries the Governor-General, who had been created Marquis of Hastings after the Nepal War, had nearly succeeded in surrounding the main body of the Pindaris, when the Peshwa and the Raja of Nagpur, two of the principal Maratha princes, suddenly turned against the British and treacherously attacked the weak bodies of troops stationed for the protection from the Pindaris of the Residencies at the capitals. Both attacks were foiled, that at Nagpur against extraordinary odds, in the once famous fight of Sitabaldi.

The British Resident, Mr. Richard Jenkins, suddenly finding an attack imminent, took up on September 25, 1817, a position on the Sitabaldi hills, a low range overlooking the Residency.

The force at the disposal of Colonel Scott, the commandant of the escort, consisted of four nine-pounder guns manned by twenty-four European Artillerymen, three troops of the 6th Bengal Light Cavalry under Captain FitzGerald, and 2,500 Infantry, only partially concentrated. This force was attacked by the whole Army of Nagpur, estimated by Sir John Hearsey at 40,000 Infantry, 20,000 Cavalry, and sixty guns which ranged from 20- to 6-pounders. The action which began on the evening of September 26 was of a most sanguinary and determined nature, a great part of the Nagpur Infantry being Arabs, who fought desperately, and for a time captured one of the two hills which formed the British position. Two of the Anglo-Indian Infantry regiments which fought so loyally at Sitabaldi had been raised but a short time previously from men of the Madras Regiments which had mutinied at Vellore in 1806. These veteran soldiers eagerly seized the opportunity of regaining their character, and gloriously attained that object. Colonel Scott divided his guns and Infantry between the two Sitabaldi hills, the smaller of which had a double summit and was higher than

the large hill with which it formed a right angle. Both hills were roughly fortified with sacks of grain and similar objects, the ground being too rocky to be entrenched. The Infantry were posted in detached bodies and so placed that their fire swept the faces of the hills; but it was found necessary to leave the little force of Cavalry for the protection of the Residency, in which was the property of the mission and also seven English ladies, who had accompanied their husbands to Nagpur. Captain FitzGerald posted his three troops outside the hedge of the Residency, the Sitabaldi hills protecting his rear: in his front was a small ravine. He received strict orders from Colonel Scott not to charge without permission, but kept officers' patrols on the move throughout the night, holding the Nagpur Army in check, and covering the concentration of the outlying portions of the British force, some of which were four miles away when the attack began. The concentration was completed by daybreak on the 27th, when the enemy's Artillery fire redoubled in violence and a succession of furious Infantry assaults began on the two hills. By 10 A.M. the plain between the city of Nagpur and the Residency had become covered with countless horsemen, and a body of Infantry supported by a battery of 12-pounder guns and twenty swivel guns on camels advanced to attack the handful of British Cavalry.

Finding that he must presently move or be destroyed, FitzGerald sent Hearsey up the hill to Colonel Scott to ask permission to charge. Scott told Hearsey that FitzGerald might seize his opportunity, but detained Hearsey for a short time in consequence of an overwhelming attack then in progress on the smaller hill.

As Hearsey watched, this hill was carried by 3000 Arab Infantry, who drove off the four companies of Sepoys on the summit and captured the two guns there. They then immediately turned these guns, and two of their own which they dragged up, on the larger and lower hill. Two of the very few English officers were at once killed by Hearsey's side, and for a

moment it seemed that disaster was inevitable. Colonel Scott now sent Hearsey to Captain FitzGerald with orders to charge ; and in order to do his best in what seemed a hopeless task, FitzGerald led his three troops through the ravine in order to gain good charging-ground. On receiving the order to advance, all the Indian troopers cheered, the Mohammedans crying ' Din, Din,' and the Hindus throwing dust on their heads, thus showing their determination to do or die. The charge which followed was among the most famous in Anglo-Indian history, the little knot of men in French-grey uniforms cutting, almost unchecked, repeatedly through and through the hordes of Maratha horsemen.

Valuable as was FitzGerald's action, that of Hearsey was even more effective. Riding in rear of the little column (in his place as Adjutant) Hearsey saw, as he emerged from the ravine, that the battery of 12-pounders was close on his left. He instantly called to the men nearest to him, thirty or forty in number, and with them charged and captured the guns. Some of his men having been trained as Artillerymen, Hearsey ordered them to dismount and to turn the captured guns on the Nagpur Infantry, who broke and fled. These gallant exploits were witnessed by the Infantry on the Sitabaldi hills, who raised loud shouts of applause, and then, seizing the moment and headed by their surviving officers, charged and recaptured the lost hill. The battle continued all day, but the subsequent attacks became less and less alarming, and gradually died away with the approach of night.

Hearsey received a dangerous and terrible wound in the head and neck in a hand-to-hand fight with the Commandant of the Nagpur Artillery. From this wound he suffered to the end of his life, but was consoled by the well-earned title of one of the heroes of Sitabaldi.

It may be added that the Residency troops were soon afterwards re-inforced and the Nagpur troops completely defeated.

The English ladies at Sitabaldi showed themselves worthy of their husbands. They remained all day on the roof of the

Residency under a heavy fire watching the fight on the hills above them. They were unwounded, but several bullets passed through their clothes. Two of them were widows by the evening.

Hearsey, in spite of his wound, served throughout the Maratha War of 1817-19, which followed this treacherous rising, and his long subsequent career was one of the highest distinction. He became a captain in August 1819, and at the end of the six years' peace, which reigned after the destruction of the Maratha-Pindari terror, he served throughout the second siege of Bhurtpur under Lord Combermere. This short campaign was followed by a yet longer peace of thirteen years' duration, but Hearsey remained in India continuously until December 1840, when, after thirty-two years' service, he took his first furlough to England, and thus missed the first Afghan War. Hearsey returned to India in October 1842, but was again unfortunate in regard to the first Sikh War (1845-6), during which he was employed with his regiment on the Sind frontier under Sir Charles Napier. The victory of Sobraon prevented Napier's army from coming into action.

In 1847 Hearsey, now a Lieut.-Colonel, was again in England, but he returned to India in January 1848, and was given command of the 7th Light Cavalry, with which corps he served in the early stages of the second Sikh War. When Lord Gough's Army took the field Hearsey was appointed a Brigadier of Cavalry. In this rank he served throughout the war with high distinction, being personally thanked by Lord Gough for his services at Chilianwala, and commanding two brigades of Cavalry at the crowning victory of Gujarat. Hearsey and his Brigade took a prominent part in Sir Walter Gilbert's famous pursuit of the broken Sikh Army, and, after its unconditional surrender at Rawal Pindi, continued the chase of the Afghan contingent, which had taken part in the war, to the very mouth of the Khaibar Pass. For these services Hearsey was made a Brevet-Colonel and a C.B., and was further rewarded by permanent appointment to the command of the brigade at Wazirabad.

In the year 1850 Hearsey was called upon to deal with an incipient mutiny of the native troops under his command, and the manner in which he disposed of this dangerous situation earned the high approval of that severe critic General Sir Charles Napier, who publicly commended Hearsey's ability, judgment, and decision.

Hearsey became a Major-General in November 1854, and two years later was appointed to command the Calcutta District. It thus happened that on the breaking out of the Great Mutiny of 1857 he was the senior military officer stationed near Lord Canning, whose adviser he became.

General Hearsey's able handling of the mutinous troops at Barrackpur, the then large cantonment near Calcutta, is a well known story. Hearsey, though now sixty-four years old, showed all the fire and decision of youth, and quelled the first outbreak by his promptitude and determination. The personal courage which checked the tide of violence after it had been let loose by Mangal Pandey was not more appreciated by Lord Canning than was the moderation subsequently shown by Hearsey, which resulted in the bloodless disarming of all the mutinous regiments within reach of the Capital. Hearsey's conduct at Barrackpur saved Calcutta from inevitable destruction, and this fact was recognised with unusual promptitude by the dignity of Knight Commander of the Bath, to which he was immediately raised.

Sir John Hearsey continued in his Command until March 1861, when, after a total service of over fifty-two years, he returned to England. His own service in India and that of his father covered a period of ninety-six years, in the first of which Clive laid the foundation of the territorial sovereignty of England in India, and, in the last, the dying embers of the great revolt had been trampled out.

If the great struggle of 1857 is to be repeated, may England have in India commanders as wise, as experienced, and as determined as John Hearsey.

H. W. PEARSE (*Colonel*).

NOTES ON WATER SUPPLY

By CAPTAIN C. W. SINGER, R.E.

Test for quality—Sources of supply—Protection of supply—Means of procuring supplies—Purifying water—Supply required—Measuring supply—Principles in arranging a scheme of water supply.

It is evident, from ravages caused by enteric fever during the South African War, that every officer, N.C.O., and private should have some knowledge of how to distinguish good water from bad, how to prevent good water from being polluted, and how to purify water when polluted, as well as the best methods of obtaining water, and the amount required daily for various purposes by men and animals.

QUALITY OF WATER

Water to be really good should be clear and colourless, without taste or smell, and should be well aerated, as shown by the formation of small bubbles after standing a short time.

The purity of water can of course be ascertained by chemical tests, but, as in the field there usually are no facilities for this, reliance must be placed on a careful inspection of the sources whence the water is obtained.

SOURCES OF SUPPLY

In the field the supply of water is usually obtained from sources easily available, such as streams, ponds or wells ; otherwise it may be necessary to sink wells. The water from running streams is usually perfectly good, while that from ponds is generally polluted from decaying vegetable or animal matter or from sewage washed in by rain.

Surface wells should be treated with suspicion, since they are liable to the same impurities as ponds ; but deep wells can be considered as quite safe.

PROTECTION OF SUPPLY

The first troops arriving at a camping ground should at once mount sentries on all water required for use, in order to prevent pollution.

The water supply is marked with flags as follows :—

White for drinking water for men.

Blue for watering places for animals.

Red for washing and bathing places.

If the supply is from wells, the water should be raised into troughs or other receptacles ; it is advisable to do this also in the case of ponds and streams, if animals are to be watered, otherwise the water may be fouled. If the water is obtained from a stream, the place from which the drinking water is obtained should be upstream of that in which the animals are watered, while below should be the bathing and washing places ; separate places must be told off for these purposes.

If the water is to be got out by dipping in buckets etc., a barrel with holes in the sides, or a gabion with stones in the bottom, should be sunk vertically, so that the dipping may not stir up the mud.

At the places where animals drink, a hard bottom of gravel or stones should be made, with water about 6 inches deep over it. If the banks are steep, a ramp should be cut straight down to the water's edge, by which the animals can come down, and leave by ramps on the right and left, so as not to interfere with other animals coming to drink.

In many streams it is advisable to raise the level of the water by means of a dam ; this can be made of large stones or brush-wood covered on both sides with earth, with a wall of puddled clay, or a tarpaulin, either in the middle or upstream side. An overflow or waste weir should be cut through one of the banks.

When the supply is from springs, each spring-head should be opened up and surrounded by a wall made by a dam, so as to raise the level of the water ; but if the water will not rise above the level of the ground, either a tube well should be driven, or a cask or gabion sunk, with puddled clay worked in between it and the sides of the excavation. The overflow may be received into a succession of casks let into the ground close together, the overflow from the first passing into the second, and so on, or deep narrow tanks with sides of puddled clay may be constructed to catch the overflow. In either case a low wall should be built all round, so as to keep out the surface water.

MEANS OF PROCURING SUPPLIES

When the supply from visible sources is impure, or not sufficient in quantity, search must be made for subsoil water, either by digging or by driving tube wells.

Springs near the surface may be looked for in depressions below the general level, where the earth is moist or the grass unusually green ; or where birds or animals have lately been scratching, or where gnats hover in swarms.

In hilly countries water is usually found at the foot of the hills, at the junctions of one or more valleys or watercourses, and in the sandy beds of dried-up rivers or pools. Tube Wells, and Lift and Force Pumps, are articles of store carried by Field Companies R.E.

The Tube Well is used to obtain water from moderate depths without the labour and expense of sinking an ordinary well ; it is useful also for raising water from ponds and rivers for filling troughs, etc., preventing the water getting fouled by animals and the bottom being disturbed by dipping buckets, etc. When used for this purpose a tube well should be driven into the bank close to the water and the water pumped up.

The Lift and Force Pump is worked by two men ; it can lift water from a depth of 20 to 28 feet, and force the water to a height of 60 feet from its former level, delivering twelve gallons a minute.

PURIFYING WATER

The best method of purifying water is by boiling. The water should be kept at the boil for at least five minutes. Boiling softens the water to a certain extent, renders dissolved organic matter harmless, and, if done properly, practically destroys all micro-organisms. Boiled water should be aerated before use; this can be done by passing it through a sieve, or by such improvised methods as piercing an empty biscuit tin with holes and suspending it over some receptacle.

As it is not always possible to provide means for boiling water, filtration may be resorted to. The Brownlow Filter is the one now used on service, although there are many others, such as the Berkefeld and the Pasteur (Chamberlain) Filters, etc.

The chief disadvantage of all filters is the slow delivery of pure water, when water containing a large percentage of suspended matter is used; also it must be remembered that a dirty filter is worse than none at all, as it may actually pollute water passing through it.

Chemicals are sometimes used for (a) precipitating suspended matter (six grains of crystallized alum per gallon is sufficient); (b) removing hardness, by adding limewater to soften water for drinking, and carbonate of soda for washing purposes; (c) oxidizing organic impurities; permanganate of potash (Condy's Fluid) removes offensive smell from water and to some small extent dissolved organic matter. It should be added to the water until a faint tint becomes permanent. It has not a disagreeable taste. Muddy water can be strained through linen mounted on a frame and covered with wood ashes.

Tannin in tea is of considerable value; a bad water made into tea is comparatively harmless.

Charcoal is a purifying agent which helps to oxidize organic matter in water. Lumps of it may be put in, or the insides of barrels may be charred, the charcoal or charring being frequently renewed.

SUPPLY REQUIRED

The minimum quantity of water required per diem in temperate climates is :

per man, for drinking	.	.	.	8-4 pints.
„ „ drinking and cooking	.	.	.	3-4 quarts.
„ „ all purposes	.	.	.	3-4 gallons.

Horses drink about two gallons at a time, and take about five minutes to drink, including the time taken up in coming and going :

per horse, mule, or ox, for drinking	.	.	6-8 gallons.
„ „ „ „ cleaning	.	.	6-8 quarts.
„ sheep or pig, for drinking	.	.	6-8 pints.

In tropical climates these amounts can be doubled with advantage.

1 gallon = 10 lb., 1 cubic foot = $6\frac{1}{4}$ gallons = $62\frac{1}{4}$ lb.

MEASURING SUPPLY

The supply of water obtainable from a well can be gauged by pumping in order to lower the level of the water in the well, and then noting how long it takes to get in a given quantity of water.

The supply obtainable from a stream can be roughly measured as follows :

Select some 12 or 15 yards of the stream where the channel is fairly uniform and there are no eddies. Take the average breadth and depth in feet in three or four places. Drop a chip of wood into the stream and find the time it takes to travel, say, 30 feet ; this will give the surface velocity per second in feet. Four-fifths of this will be the mean velocity, and this multiplied by the sectional area will give the yield per second in cubic feet of water.

PRINCIPLES IN ARRANGING A SCHEME OF WATER-SUPPLY

The following should be the guiding principles in arranging a scheme of water-supply for a small force of, say, 400 men and horses, encamped on the banks of a stream for a night or two, the only facilities for water supply available being four water carts, each holding about 118 gallons, and carrying a lift and force pump.

The water required by the force for one day will be :—

Men's drinking and cooking	400	gallons.
Men's washing	1,200	„
Horses' drinking	2,400	„
Total	4,000	„

The men's drinking and cooking water can be pumped up and stored in the water carts by means of the lift and force pumps.

Horses will have to drink from the stream, although, in order to prevent the water being fouled, it would be better—if canvas water-troughs are available—to pump the water into them.

Men may bathe or wash in the stream below the horses' drinking-place, but there is no objection to men filling buckets, water-bottles, etc., from the stream above the horses' drinking-place, provided that any washing is carried out at least twenty yards away from the banks of the stream.

If troughs are available for watering the horses, allowing four feet per horse and five minutes per horse to drink, 400 horses will require $\frac{400}{12} \times 4 = 133$ feet of trough, or, say, four 33-feet service troughs, if one hour is allowed for watering, and the watering is done from one side of the troughs only ; in which case it might be more convenient to have the troughs parallel to the banks. If the horses are watered from both sides at once the troughs should be placed at right angles to the banks. In this case two troughs will suffice to water the horses in an hour, or, with four troughs, the watering could be done in half an hour.

The troughs will easily hold the amount of water required, and two pumps working for three-quarters of an hour will supply the necessary amount.

RUSSO-JAPANESE WAR.—II

By COLONEL W. H. BIRKBECK, C.B., C.M.G.

Difficulties of raising and training Cavalry in Japan—Oyama's position on the Shaho, January 1905—Mischenko's Raid on Yingkow, January 8-13—Cause of Japanese Cavalry's inactivity—Battle of Heikoutai, January 25-29—Japanese Cavalry relieved of the duty of holding villages—Raids of Colonel Naganuma and Major Hasegawa, January 10 to March 20—Great results achieved by these two squadrons.

WITH the concentration of Oyama's First, Fourth, and Second Armies, and the capitulation of Port Arthur, much of the strategic interest of the campaign ends, and the subsequent operations partake rather of the nature of a 'war of positions.'

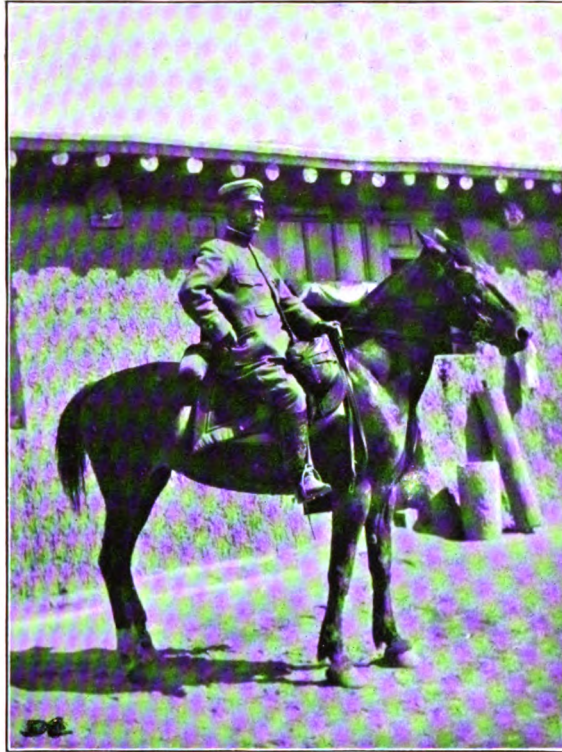
From the Liao to the foot-hills of the Korean mountains is not more than 100 miles; neither side was willing to risk complications by openly violating the Liao, which had been fixed as the boundary of Chinese neutral territory, and movement through the hills was impossible; operations were therefore confined to what may be called a strategic defile, in which the two armies faced each other with no room for manœuvre.

It is strange therefore that in this later period we should find the incidents from which to draw Cavalry lessons, but so it is—the fact being, I think, that it was not till 1905 that Oyama began to appreciate the value of his Cavalry and to put an ever-increasing trust in General Akiyama's handling of them.

That the true value of Cavalry should have been underrated in Japan is, after all, only natural; for it was an exotic growth.

The creation of the Cavalry arm of the modern Japanese army had been attended by grave initial difficulties, physical, monetary, and traditional.

THE
RUSSO-
JAPANESE
WAR.

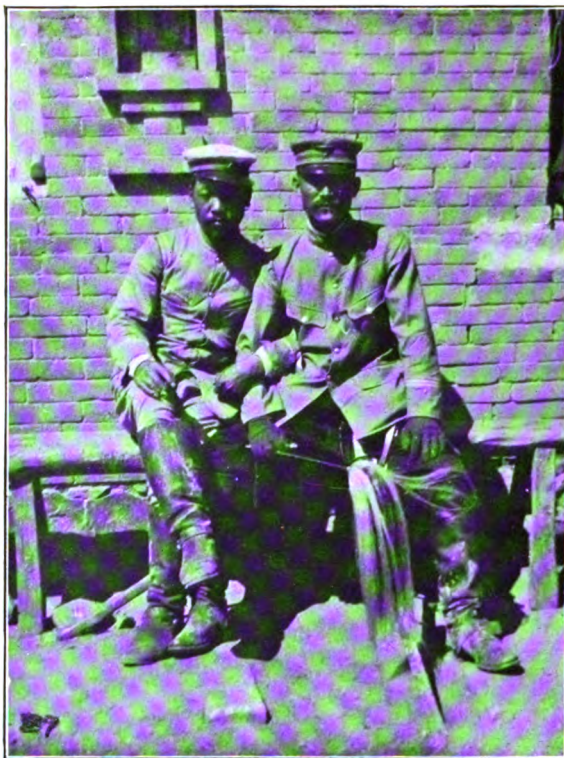


MAJOR-GENERAL AKIYAMA.
Commanding 1st Cavalry Brigade.

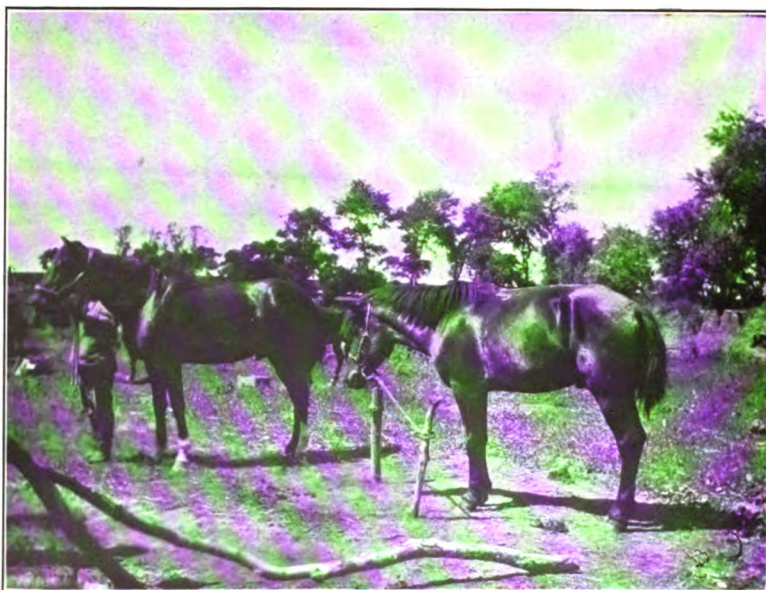


COLONEL KOYKA. (13th Cavalry)
Riding an Austrian Horse

THE
RUSSO-
JAPANESE
WAR.



MAJOR HASEGAWA and COLONEL NAGANUMA.



TYPES OF JAPANESE CAVALRY HORSES.
Original and Improved Breeds.

With a population of 44,000,000 living on 4,000 volcanic islands, of whose total area of 182,000 square miles only one-sixth is cultivable, the rest being rugged mountains and dense forest, it is easy to realise that there is little room for horses.

There is practically no pasture, every available square inch is cultivated, tillage is done with the spade, and both in town and country vehicles are drawn chiefly by hand.

Even in Tokyo, Yokohama, and other large towns horses are few and far between, and they are in either official or European hands. In the country the Cheval-de-luxe is non-existent.

Again, Japan is a poor country—her revenue being only 30 millions sterling as compared with our 140 millions, and Cavalry is an expensive arm to keep up.

Traditionally, too, the armed retainers of the old-time feudal lords were footmen of the Scottish clansman type, not knights in armour; while the profession of groom was among the very lowest in the social scale.

From such unpromising conditions, with animals few in number and of a type degenerated by indiscriminate mating, and with men entirely unaccustomed to handle horses, Japan has evolved a force of Cavalry of which no European nation need be ashamed.

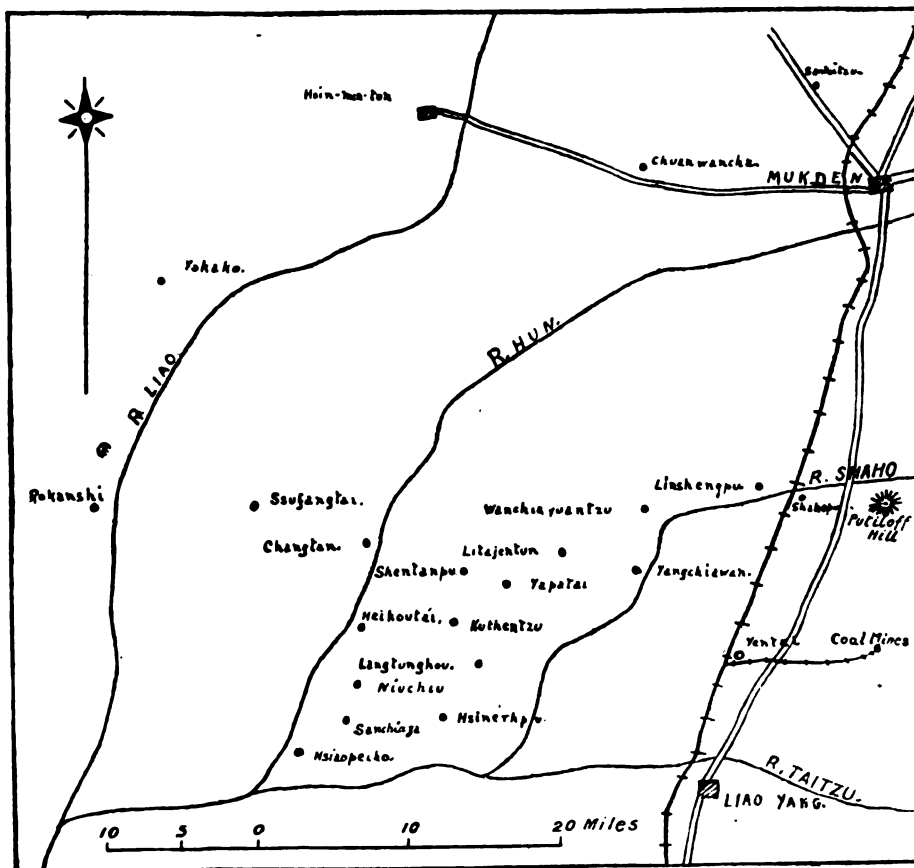
Her equine resources have been developed and improved, so that there were over one million beasts in the country when the war began; her Cavalry recruits have been selected for intelligence and suitable physique, and have been trained upon sound and practical lines.

Though the horses may still be mere ponies, often ill-shaped and badly broken, they seem to keep on going; and though the men may be ugly riders, they stick on and have no fear, while for individual intelligence and enterprise they are hard to beat.

The Japanese Cavalry, in short, lacks numbers and perhaps polish, but not practical efficiency, and that they did not distinguish themselves more in Manchuria is attributable mainly to the over-caution and want of appreciation of the proper use of

Cavalry displayed by the higher commanders rather than to any failure of that arm itself.

The commencement of 1905 saw Oyama with three of his armies concentrated, in a position facing the Russians, on the Shaho, the remaining army—Nogi's—being now set free to join him by the capitulation of Port Arthur, January 2.



MAP I.

His headquarters were at Yantai; on the right Kuroki's First Army (2nd, Guard, and 12th Divisions, and 2nd Cavalry Brigade) held the front from the Taitzu River to near Putiloff Hill; from opposite Putiloff Hill to the railway was Nodzu

with the Fourth Army (6th and 10th Divisions) ; and west of the railway was Oku with the Second Army (3rd, 4th, and 5th Divisions).

Prolonging Oku's left flank as far as the Hun was Akiyama, with headquarters at Litajentun, holding Shentanpu, Heikoutai, and the intervening villages, with an observation post at Changtan, on the right bank of the river.

Akiyama had with him his own eight squadrons of the 1st Brigade and two squadrons from each of the 3rd, 4th and 5th Divisions of the Second Army, two squadrons from the 6th Division of the Fourth Army, and two squadrons from the 8th Division, just arrived from Japan and held in general reserve at Yentai—eighteen squadrons in all—supported by two battalions of the 4th Division and a battery of field artillery.

The 2nd Cavalry Brigade under Prince Kanin was attached to the First Army on the right, and after operating with some success against Rennenkamf had been withdrawn, owing to the mountainous nature of the country, considered unsuitable for Cavalry, and was in rear of the right flank.

Opposite to Akiyama were a division and a half of Cossacks under Mischenko, a General of some reputation as a mixed force commander.

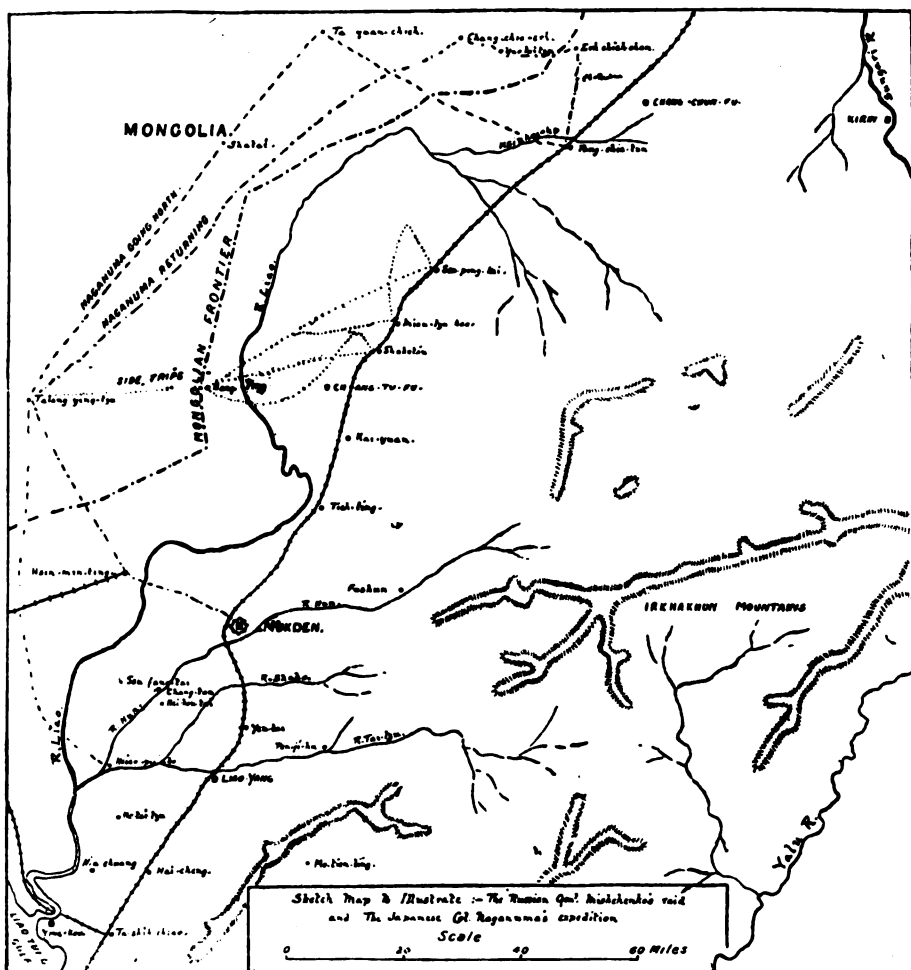
Beginning life in the artillery, he had gone to seek his fortune in the East, and had commanded the Railway Guards at Liaoyang for several years, taking an active part, in command of a considerable force, in the pacification of that part of Manchuria after the Boxer outbreak. The country was therefore well known to him.

Mischenko's First Raid.—The first incident of 1905 was this General Mischenko's raid in Yingkou. (Map II.)

Leaving the neighbourhood of Mukden on January 8 with sixty-six squadrons, twenty-two guns, four machine-guns, and four companies of mounted infantry, but encumbered with a train of 1500 pack-ponies, he passed round the Japanese left and appeared on January 10 before Hotaitzu, a village a few miles

north of Niuchuang, whence the 1st Cavalry Regiment of Nogi's army¹ withdrew before him.

On January 11 Niuchuang was taken, the garrison (one reserve company) escaping to Haicheng and Yingkou, within twelve miles of which latter place the Russians bivouacked.



MAP II.

That night Oyama ordered the immediate despatch of three battalions of the 8th Division, at Yentai, under Colonel Tsugawa, to the threatened point.

¹ Cavalry being useless at Port Arthur, the divisional squadrons of Nogi's army were employed on the lines of communication.

Yingkou appeared to be at Mischenko's mercy. It contained two months' supplies of food, forage, fuel, and medical stores for the whole army, and was guarded by one reserve company, 200 armed soldiers of the train, a troop of Cavalry, and the remnant of the Niuchuang garrison.

On the evening of the 11th Cossacks had cut the line to Tashihchao, but, realising that upon it hung his only hope of succour, the Yingkou Commandant had sent out and repaired it in the night.

Mischenko, however, stayed where he had slept till after midday on the 12th, and it was not till 4.30 P.M. that he opened on Yingkou with his guns, setting fire to the railway station and some forage stacks, and attacking two hours later with twenty-three squadrons dismounted.

He was too late; at 4 P.M. a battalion had come in by rail from Tashihchao, diverted on its way up country by the Commandant there on his own initiative, and the Cossacks were easily repulsed with heavy loss.

Next day (13th) Mischenko retired, and rejoined his army at Ssufangtai on the 18th without difficulty, having captured 100 wagons, and burned one railway station and a few stacks of forage, at a cost of seven officers and seventy men killed, and thirty-two officers and 257 men wounded.

Mischenko had failed, for lack of determination and dash, to carry out his orders, and had neither destroyed the vast accumulation of supplies at Yingkou, nor successfully interfered with the Japanese communications.

Comment upon this performance is needless, but what of the Japanese pursuit?

That a large force of Cavalry was round his left flank was known to Marshal Oyama on the 10th, yet it was not till the night of the 11th that Tsugawa was sent to oppose them, *and then with Infantry only.*

Arriving at Kengchuantzu, near Haicheng, by rail on the morning of the 12th, Tsugawa was joined by two reserve battalions on their way to the front and by the 1st Cavalry

Regiment, and striking out west to the Liao he succeeded in engaging only Mischenko's rearguard.

The whole incident is unlike the usual Japanese methods. As a rule, whenever the Russians assumed the offensive, the blow came back at them like lightning; but here we see Mischenko leisurely retiring, practically unmolested.

The reason is not far to seek. *Akiyama's eighteen squadrons*, the only considerable mounted force available, *were firmly anchored to the entrenchments they were ordered to defend*, and the rest of the thirty-five squadrons—which, allowing one squadron per division, and, say, seven for the communications, might have formed the independent Cavalry brigades—were scattered and ineffective.

It must not be supposed that the Manchurian winter makes movement difficult; on the contrary, it is in the winter that the Chinese always travel. There is hardly any snow, and the frost makes the marshes and rivers passable everywhere, while the numerous villages are full of forage.

Surely the right place for the bulk of the Cavalry was echeloned in the rear of the Japanese left, free to make use of their mobility in the country best suited to their action; and had they been given their chance, Mischenko would not have got away so easily.

The Battle of Heikoutai.—The next incident is the battle of Heikoutai (Map I.), one of the most desperate field fights of the war, fought under conditions of extraordinary hardship, on frozen ground, with the thermometer below zero; in it the Cavalry played no inconsiderable part, though the method of their employment is of the strangest.

From the middle of January considerable activity was observable on the Russian right, which was extended to include Ssufangtai, where Mischenko had established his headquarters after his abortive raid.

Some Engineers were therefore sent to Akiyama to strengthen his fortifications, and instructions were given that if surrounded

his posts were to be held to the last man : to such strange use did Oyama put his Cavalry's mobility.

On January 25 the Russians advanced in three columns—one division against Shentanpu, one division against Heikoutai, and Mischenko's Cavalry south of the latter place.

The 8th (Tatsumi's) Division from the general reserve at Yentai was at once ordered to Heikoutai (eighteen miles' march), and the existing garrison (four squadrons of the 5th and 8th Divisional Cavalry, one reserve battalion, and four guns) was placed under General Tatsumi's orders.

Heikoutai fell before the Russian attack, which almost surrounded it, the garrison escaping east at 4 P.M. ; but Shentanpu and the other villages held by Akiyama's Cavalry, with infantry support, stood firm, though attacked in overwhelming numbers.

On the morning of the 26th the 8th Division, which had reached Langtungkou the previous night, attempted to retake Heikoutai, attacking with two brigades from east and south-east, with one brigade in reserve at Kuchentzu. The attack could make no headway, and its left was threatened by Mischenko, who advanced in the direction of Niuchu.

Shortly after noon a Russian division pushed in south of Shentanpu, with the evident intention of taking that village in rear. The garrison (one regiment of the 1st Cavalry Brigade, one reserve battalion, some Engineers, and six guns) stood fast and shelled them, while the deployment of the reserve brigade of the 8th Division north of Kuchentzu forced them to withdraw.

At 4 P.M. the Russian infantry attack came on again in earnest against Shentanpu, and actually gained a footing in the outskirts of the village, which it surrounded on three sides.

The defenders had given up hope, and were prepared to literally carry out their orders to fight to the last man, when help arrived in the form of two battalions, a battery, and some machine-guns from the 3rd Division, the reserve of the Second Army, which Oku's foresight had moved up to Yang-chiawan. The

situation was saved, but all through the night heavy fighting continued, the village being subjected to the fire of thirty Russian guns, which created havoc and confusion among the horses of the mounted troops.

Imagine a large Indian mud-village with some 700 or 800 horses under the fire of thirty quick-firing guns !

Early in the morning the garrison made a sortie and drove the Russians from the outskirts of the village.

On the 27th the bombardment continued, but no further infantry attack was made on any of Akiyama's villages during the day.

The 5th Division, sent over by Oyama's orders from the right of the Second Army the previous night, reached Langtungkou at 8 A.M.

The 8th Division again attacked in the direction of Heikoutai ; not only did they make no progress, but were hard pressed to hold their ground, their left and rear being threatened by Mischenko's Cossacks, who penetrated unopposed as far even as Hsiu-erh-pu.

Realising the precarious situation of the 8th Division, the 5th Division pushed on without rest between Shentanpu and Heikoutai, threatening the Russian line of retreat.

In the night the Russians made another determined attack on Yapatai, a small village in the Cavalry line, from which they were only repulsed by hand grenades, which an Engineer officer improvised on the spot.

The crisis was passed : on the 28th the 2nd Division came over from the First Army, and the 2nd Cavalry Brigade was also moved to this flank. On the 29th the Russians withdrew across the Hun.

After the battle the left of the Second Army was extended to the Hun at Heikoutai, and Akiyama's Cavalry, relieved of the distasteful work of holding villages, though still forming part of the Second Army, was placed in rear of it at Sanchiatza. They had lost 582 horses without ever getting on their backs.

The 2nd Cavalry Brigade, which had followed Mischenko across the Hun, was placed further south at Hsiaopeiho, screening the assembly of Nogi's Third Army west of Liao-yang.

It is important to note that, though the head of the Third Army was already close up, Oyama preferred to bring a division over, even from the First Army, rather than risk exposing Nogi's presence by utilising any of his troops at Heikoutai.

Japanese Raids.—From Heikoutai it is a relief to turn back to a much brighter page of the Cavalry story, *i.e.* those brilliant enterprises against the Russian communications with Harbin—the raids of Colonel Naganuma and Major Hasegawa, which emanated from Akiyama's Cavalry during his occupation of the Litajentun-Shentanpu line—and to follow in detail Colonel Naganuma's operations, of which a clear and graphic account is contained in the British Attaché's reports.

On January 4 Naganuma's party, consisting of twelve officers (including a doctor and an intendant) and 160 N.C.O.s and men, chosen (both men and horses) from the whole command, assembled at Shentanpu to make their preparations, which included instruction in the cooking of the Chinese grain on which they would have to live and the accustoming of their horses to Chinese forage.

Their strategic object is clearly defined in the peroration of Akiyama's address to the officers: 'If you carry out your duty you will cut the enemy's communications and cause him great inconvenience, while, even if you should fail, the mere fact of your appearance in his rear will produce a *great moral effect*, and lead to the withdrawal of troops from the front line in order to guard against you. Let every officer remember that on this occasion the Cavalry is about to assist the whole army, and, whether you succeed or whether you fail, you go forth as the representatives of the Cavalry of Japan.'

The Cavalry arm was on its trial, and this was its first real chance of distinction.

The following summary gives the details of articles carried on man and horse; beyond two days' rations for man, and one for horse, the party was to live on the country, paying for what they took.

Right Wallet.—Two tins of explosive = two charges complete; thirty rounds of ammunition; one field dressing; small carbine tools; one pair of woollen gloves; one pair of stockings; writing paper.

Left Wallet.—Seventy-five rounds ammunition; wrench for unbolting nuts of railway lines; towel, tooth-brush, needle and thread; enteric pills, sticking-plaster, and small personal items.

Right Saddle-bag.—Nose-bag; 130 rounds ammunition; canvas bucket.

Left Saddle-bag.—Mess tin; 120 rounds ammunition; one tin Soy sauce; one Balaclava cap.

Right Shoe-case.—One pair fore shoes.

Left Shoe-case.—One pair hind shoes, and two sets of frost nails.

Behind the Saddle.—Fur waistcoat; *tente d'abri* without poles.

Under the Saddle.—Two blankets (for man and horse).

On the Man.—Ninety rounds of ammunition and his arms.

Two days' rations per man and one day's grain for horses were taken, and each non-commissioned officer carried two priming charges, one hand axe, one wire-cutter, and one folding saw. The weight averaged about seventeen stones.

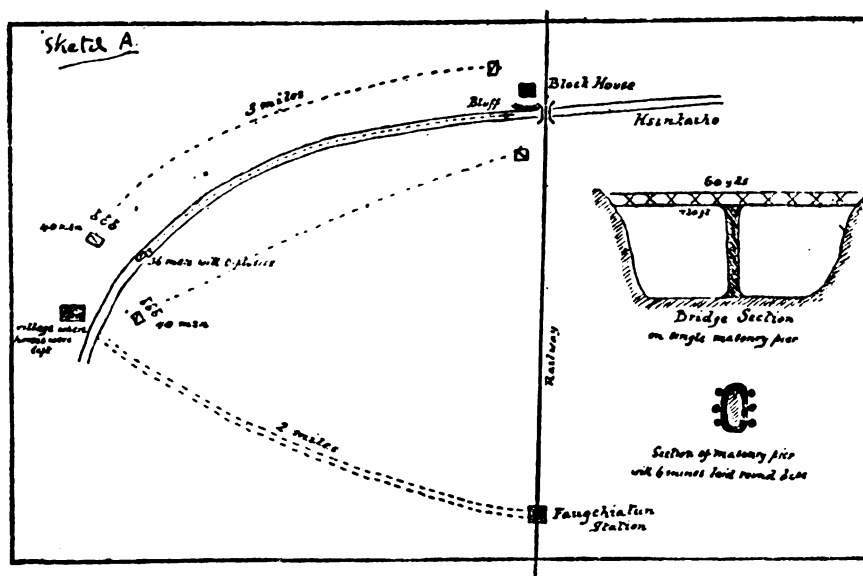
A thousand pounds was taken in war notes, estimated to last them sixty days at 1s. 6d. per diem for man and horse; 980l. was actually spent in seventy days.

The itinerary is shown on Map II. Leaving Hsiaopeiho on January 10 the party crossed the rear of Mischenko, going south; but ascertaining that his movement was under observation by patrols of the 1st Cavalry, they took no further notice of him, and went on, crossing the Hsinmintun railway on the 13th.

Here they turned north, moving within the Mongolian border

parallel with the general line of the Russian railway and some eighty miles west of it. A communicating post was left under a N.C.O. at Talangyingtzu to transmit reports and burn supplies collected for the Russians in the neighbourhood.

On January 20 the squadron encountered some Mongolian Cavalry at Shatai, 120 miles due west of Chang-chun-fu, and on the 30th reached Ta-yuan-chih, where they halted six days to send out spies and make final preparations for a dash at the railway eighty miles distant.



The point selected was a bridge over a small stream, the Hsinkaiho, twenty miles south of Chang-chun-fu, and at 10 P.M. on the night of February 11 the raiding party reached a small village two miles distant from the bridge (see Sketch A), of the exact position of which they were uncertain until the sound of a train passing over the ironwork revealed it.

Leaving their horses under guard at the village, they moved up the stream at midnight, when the moon went down, in three parties, 40 men on each bank, and an explosive detachment of 86 men along the frozen river-bed.

The party on the left bank captured a Cossack patrol near

the bridge, and that on the right engaged the blockhouse which defended it, while the dynamite was laid at the base of the pier and successfully exploded.

The whole then withdrew with a loss of one officer and two men killed, and one officer and 8 men wounded, found their horses unmolested, and at 6 A.M. on the 12th started for Ehrtaihua, where they rested, reaching Ehr-chieh-shan that night.

Next day, February 13, they turned west, making for Mongolia, and heard from the Chinese of the arrival in their vicinity of Hasegawa's party, which had crossed their line going north.

On February 14 they met at Yaotaitzu a party of Russian Cavalry, estimated at 300, with two guns, which opened fire on them at 4000 yards. (Sketch B.)

Naganuma sheltered his command behind hill 'A,' from which he viewed the situation and decided to attack.

On his moving out to threaten the flank of the Russian guns they limbered up and retired to Chang-chia-pu, which they occupied, posting their guns on a hill south-east of it.

Naganuma attacked the village, dismounted, with half his force ; while the other half, mounted, threatened the guns.

The Russians were driven from the village, and the mounted party, charging, captured a gun and wagon at the entrance to village 'C.'

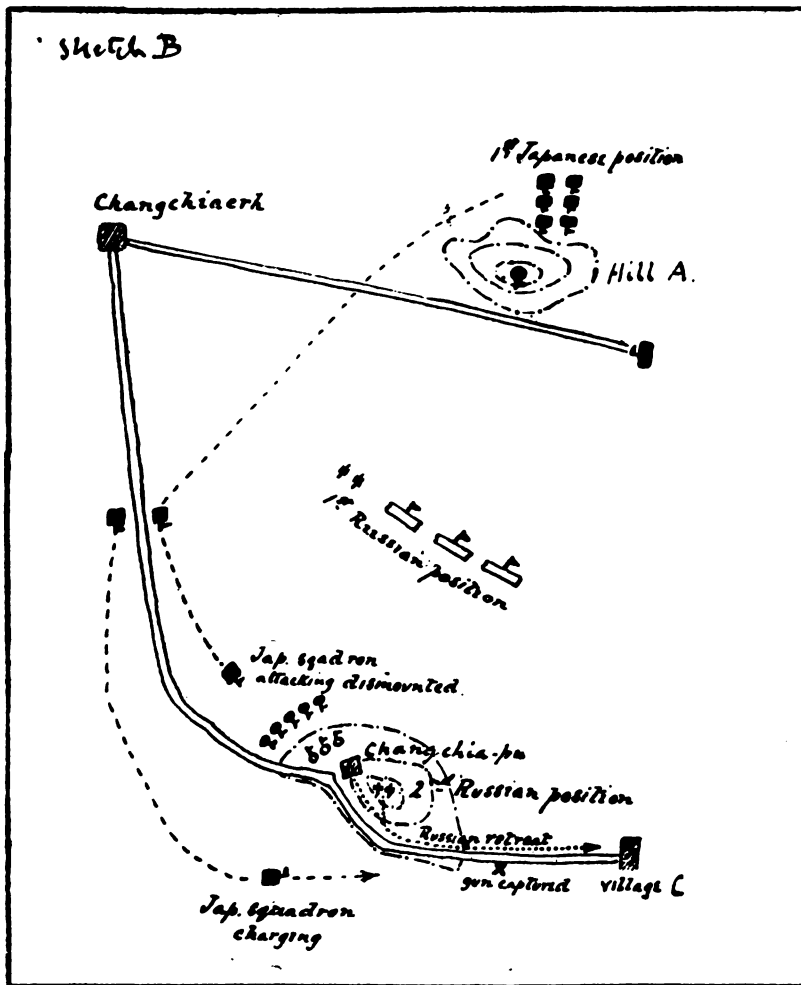
The Japanese lost heavily, two officers and sixteen men being killed, and two officers and forty-four men wounded, the casualties occurring chiefly in the dismounted attack on the village.

Having disposed of the Russians, Naganuma withdrew into Mongolia with the remnant of his force, and on March 4 reached Talangyingtzu, where the communicating post had been left. Here he heard of the commencement of the battle of Mukden, and decided to make another dash at the railway, in spite of the fact, which he now knew, that a whole division of Cossacks was guarding it against him,

Leaving his sick and wounded at Talangyingtzu, he sent out his fit men, some eighty in all, in two parties. They succeeded

in cutting the line and telegraph at three points, though probably the damage was not serious, and were back in Talangyingtzu by March 17.

The whole force then marched in to Mukden, where they broke up.



Naganuma had been away from January 9 to March 20, seventy-one days, and the main body, exclusive of the side trips from Talangyingtzu, had covered some 800 miles. After deducting the 25 days on which they had halted, the average journey of the marching days works out to only 18 miles, but on one

occasion 75 miles were covered in 30 hours, and 78 more in the next 42 hours, making 153 miles in three days.

Exclusive of casualties in action, only two horses dropped out from sickness, and the temperature varied from 4 to 22 degrees below zero.

Major Hasegawa's party left a week later and returned about the same time, having covered 1100 miles at an average, including halts, of some 16 miles a day. He cut the railway north of Chang-chun-fu, and even crossed the Sungari, destroying a supply depôt within 40 miles of Harbin. He had nine men killed and wounded, and lost twenty-one horses.

It is interesting to compare with Mischenko's barren raid the results achieved by the bold and determined handling of these small parties, which had succeeded in diverting at least a whole division of Cossacks from Ssufungtai to guard the railway, and so gone far to secure the success of Nogi's turning movement at the battle of Mukden.

These incidents and many others that could be named, of small officers' patrols which rode right round the Russian rear between Mukden and Tiehling, show the stuff of which the Japanese Cavalry were made.

Though fearless and intelligent, these men were not born scouts, like the frontiersmen of the bush, the veldt, and the prairie, nor had they in their veins the hard-riding squires' blood which made our officers' patrols in the Peninsula so famous.

Horsemanship, horsemastership, map-reading, invisibility, acuity of vision, and all the scout-craft which made for their success had been learned in and around their barracks, and the only initial advantages they had over their enemy lay in the facility with which they could communicate by writing with the Chinese inhabitants of the theatre of war, and in the burning patriotism that led every Japanese soldier to look upon death in the service of his country as the highest of all military honours.

‘ Not once nor twice in *their* rough island story
The path of duty was the way to glory.’

THE FEEDING OF THE TROOP HORSE IN INDIA

By COLONEL H. DE B. DE LISLE, C.B., D.S.O.

IN India the subject of forage is far more difficult to master than in England; but it is one with which every officer of mounted troops must be intimate to ensure his horses receiving their full allowance. Every horse is entitled to a standard ration, which, if drawn with judgment, is sufficient for their requirements, but which will not keep them in condition unless squadron leaders understand the best scale of feeding for the different seasons of the year. For example, Australian horses require from 15 lb. to 18 lb. of grain during the manœuvre season to enable them to do long and fast work and to remain fit. To give this liberal ration the horses must be mulcted during the months of the hot weather, when a low diet is sufficient.

The standard ration to which every Australian or English horse is entitled daily is as follows :—

Gram	2½ lb.
Barley	5 lb.
Bran	2½ lb.
Hay	20 lb.
Bedding	8 lb.

The value of this daily ration varies in every station, and depends on the contract prices paid by the station supply officer. An account is opened by this officer with every unit on April 1, and the value of the daily ration, multiplied by the

number of horses, is placed on the credit side each day. On the debit side is shown the amount of forage actually drawn and its value at contract rate. Units are permitted to draw any kind of forage in lieu of the standard ration, but are held responsible that the account is not overdrawn on March 31 of the following year. Any balance credit on this date lapses to Government. The questions which the squadron leader must decide for himself are :—The nature of the grain ration he proposes to give his horses, the quantity at different seasons of the year, and how to balance his forage account.

Although the arithmetical calculation is simple, some experience of India, its variation in climate, and the programme of the annual training is necessary before a forage scheme can be worked out which will give the horses every possible benefit. The first essential is to find out the contract price of each kind of grain in the standard ration, as well as of the grain required for consumption. For example, the price of gram varies from 2.12 Rs. to 4.8 Rs. per 100 lb.; that of oats from 2.8 Rs. to 7.8 Rs. per 100 lb. It is better, therefore, to feed on oats in some parts of India, whereas to do so elsewhere would mean starvation for the horses. The price of hay and bedding, which are supplied by Government grass farms, always remains fixed at 1.4 Rs. per 100 lb.

Having compared the prices of the various kinds of grain, the squadron commander must then consider the requirements of his horses during the various seasons, having reference to his training programme. In the plains of Northern India, squadron, regimental, and brigade training occupy the cold season from November to February inclusive. On the other hand, in Quetta the training season begins in April. It is evident, therefore that the scale of feeding requires careful preparation, and is dependent on the training season and the value of each kind of grain available. During the training season Australian horses will require at least 15 lb. of grain daily, and even during the hot weather they cannot live on less than 9 lb. or 10 lb.

The problem is no simple one, but with care and some experience it can be solved.

First of all, it must be realised that only 110 horses in the squadron out of a total of 140 are required for mobilisation. The balance is made up by remounts and unfit horses which are constantly employed for the instruction of recruits. The five pounds increased grain for four months for a hundred horses must be found by making some alteration in the standard ration, and this scale of feeding must be prepared in advance to enable the supply officer to provide for the requirements and to make his contract.

There is one means of saving money which should always be resorted to when possible. This lies in the bedding. Every horse is allowed 8 lb. of bedding daily, and the fixed rate is 1.4 Rs. per 100 lb. During the hot weather horses are quite as comfortable on sand as on straw, and the daily saving in a squadron of 140 horses is $\frac{8 \text{ by } 140}{100}$ by $1\frac{1}{4}$ Rs., or 14 Rs.

In six months the total saving in bedding alone would be 2,550 Rs., and the cost of sand not more than 200 Rs. This alone would provide an extra 5 lb. of grain daily for a hundred horses for four months, provided the rate does not exceed 3.8 Rs. per 100 lb.

These calculations are dull reading, but it is essential that every squadron officer and every troop sergeant should understand the necessity for economy in forage, and also be able to calculate the best way of providing for the extra feeding necessary during the training season.

It is not easy to lay down fixed rules as to how squadron horses should be fed. The conditions are so dissimilar in various stations, both as regards climate and prices, that what is possible in one may be unsuitable in another. There are, however, certain principles which may serve as a guide. The smallest ration is required during the hot months when severe work is impossible. As soon as the training season closes it is advisable to allow the horses to get into heavy condition, or, to use the

term of training stables, to 'let them down.' For this the best feeding is half oats and half bran, with a small proportion of boiled barley. At first 7 lb. of each is a good allowance, with 2 lb. of boiled barley added to the night feed. When bellies are well down and hips are well covered the ration may be reduced to the normal summer feed—6 lb. oats, 4 lb. bran, 1 lb. boiled barley. In addition as much lucerne and green grass should be given as can be obtained. There is usually considerable difficulty in arranging for a full ration of 30 lb. green grass, but when possible half the hay ration should be exchanged for green grass. The equivalent of the standard ration of 20 lb. hay is 30 lb. green grass, called 'Dhoob' grass in most parts of India. Horses fed with half of dry and half of green would therefore get 10 lb. hay and 15 lb. grass.

Towards the end of the summer horses must be gradually brought on to the higher scale necessary for the training season, when the daily ration may be increased to :—

12 lb. oats
2 lb. bran
2 lb. boiled barley.

When actually at manœuvres an extra ration of 2 lb. of gram may be added with advantage. Gram in India has the same effect as beans or peas in England. Horses are very fond of this grain, but if given in large quantities it is liable to cause liver troubles.

To those who have never experienced the difficulty of maintaining Australian horses in India in hard muscular condition, the details of feeding may appear vexatious. There is, nevertheless, every need that this subject should be absolutely mastered before a squadron officer can obtain good results with all his horses. Horses with the correct weight-carrying conformation can be kept fit for service without much trouble, but, as all the horses provided for the Army in India do not fulfil this condition, more care must be given to enable them to take the field.

FEEDING OF THE TROOP HORSE IN INDIA 51

When once the Australian horse has his muscles developed, he compares most favourably with any class of horse in the world. To obtain this development in aged horses requires all the art of a public trainer. That it can be done may be seen in any Cavalry barracks, but there, too, the many failures are proof that our system of importing aged horses is open to improvement, and also that too much attention cannot be paid by all ranks to horse management in India.

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SCHOOL OF INSTRUCTION FOR MOUNTED INFANTRY AT LONGMOOR

By **BREVET-MAJOR A. J. MCNEILL**, *Seaforth Highlanders (late
Adjutant, School of Instruction for Mounted Infantry).*

Introduction—Organisation of the School Staff and Training Battalions—
Artificers—Accommodation—Cobs—Methods of Training—Drag Hounds—Polo.

THE Aldershot School of Instruction for Mounted Infantry was moved to Longmoor Camp in the autumn of 1903. There was at that time only room for two companies, and one company therefore remained in the old Mounted Infantry lines in the North Camp, Aldershot. On December 15 of that year the present officers' mess was opened, the officers of the two Mounted Infantry companies at Longmoor having previously messed with the Royal Engineers. By degrees the stables were finished, and filled with successive batches of remounts for the additional training battalion which was soon to be formed; but it was not until May 1, 1904, that the school finally blossomed out into the brigade of two complete battalions, which has ever since been its establishment. Similar schools were at the same time established at Bulford Camp, Salisbury Plain (four companies), and in Ireland (two companies). The former was, however, abolished in 1906, and the latter in 1904.

ORGANISATION AND EQUIPMENT OF THE SCHOOL AND OF THE TRAINING BATTALIONS

The permanent staff of the school consists of a commandant, an assistant commandant, and an adjutant and quartermaster. There is also a veterinary officer attached. In addition there is

SCHOOL OF INSTRUCTION AT LONGMOOR 53

one warrant officer (the sergeant-major of the school) and the following staff of N.C.O.s and civilians :—

Farrier Quartermaster-Sergeants .	2
Quartermaster-Sergeant . . .	1
Armourer Staff-Sergeant . . .	1
Saddler Sergeant	1
Farrier Staff-Sergeants	6
Orderly-Room Sergeant	1
Orderly-Room Clerk	1
Civilian Subordinates (ex-soldiers)	51

The training battalions are formed as follows :—A circular letter is issued quarterly by the War Office detailing the Infantry battalions serving at home that are to send sections to the school for training. These sections are grouped into six companies of four sections each, which are in turn formed into two battalions, the temporary staffs for which are selected from different commands on the recommendation of the commandant of the school.

The battalion commander must be a field officer with previous Mounted Infantry experience, and the adjutant is usually an officer (a captain if possible) who has already been trained at Longmoor, and is up to date in the system of instruction.

The company commanders are also expected to have had experience with Mounted Infantry, but this is not always possible.

One of the greatest difficulties is the provision of efficient shoeing-smiths. Each section has one shoeing-smith on its strength ; but, as these men are as a rule merely cold-shoers, with little or no previous experience, the shoeing would suffer accordingly. To obviate this, promising men (at least one per company) are retained for a year to undergo further training as shoeing-smiths, and with their help the farrier-sergeants manage to keep their horses shod up.

There is one saddler to each company, trained by the Ordnance Department at Aldershot, before going to Longmoor. They work under the saddler-sergeant of the Permanent Staff, and have plenty to do, in order to keep pace with the necessary repairs. At the end of the training each saddler is carefully reported on, and if promising, recommended for a long course at Woolwich. The above are the only men on whom the Mounted Infantry can depend as farriers and saddlers on mobilisation.

All the buildings in the camp are of iron, the men's huts being of the usual pattern. The stables each hold thirty-four horses, and are roomy and well ventilated. The forge, however, is a makeshift, being rather dark and cramped—and there is no infirmary stable, nor are there as yet any isolation boxes.

The saddlery in use is the universal pattern saddle as supplied to the Cavalry, though there is still a percentage of Yeomanry pattern saddles, with both leather lined and numnah panels. This latter saddle is found to be far from satisfactory, as is shown by careful reference to the casualty returns during the past four years. With one or two exceptions, any sore backs which have occurred have been caused by these Yeomanry (or Colonial) saddles. The bit used is, of course, the regulation Portsmouth reversible, which is found most satisfactory in every way. One rein only is used, worn on the cheek, and no man is allowed to use the middle or bottom bar without special permission from his officer. Similarly every curb chain must be worn on the longest link, and thus the cobs' mouths are to some extent saved from the efforts of the beginners, who succeed each other every three months.

Drill order consists of the service dress jacket and cap, cord riding pants, putties and ankle boots without spurs,* bandolier, belt and sidearms, stripped saddles.

In *marching order* (Plates I. and II.) articles required may be

* N.B.—About twenty pairs of spurs are issued to each company, which are given out at the discretion of the company commander.

carried as follows, but no hard-and-fast rule to suit all equipment and all countries can be laid down :—

On man ; Drill order with haversack and water-bottle.

On horse : In front of saddle. Great-coat rolled 36 inches, and fastened with two baggage straps and centre cloak strap.



PLATE I.—M.I. MARCHING ORDER.

If picketing gear is carried, two men in each group carry, one a picketing peg for the built-up rope, and the other a mallet, fastened to great-coat on the off side.

ON SADDLE.

Near side.

Heel peg.

Built-up rope.

Heel rope.

Nose bag.

Mess tin (in nose bag).

Off side.

Rifle Bucket.

(Note.—When nothing is carried on the cantle of the saddle the mess tin may be worn on the belt at the back.)

The rifle is carried slung over the man's shoulder with *short* sling (to avoid play), the butt resting in a bucket on the off side, which should be as high up as possible ; the man and horse thus equally dividing the weight. (See Mounted Infantry Training 1906, Section 18.)

The establishment of cobs is 887, and they are at present a very useful lot indeed. It is now realised by the Remount officials that the Mounted Infantry cob of old, *i.e.* of the butcher's pony stamp, is useless for present-day necessities, one of the functions of Mounted Infantry now being to work with a Cavalry Regiment as part of a mounted brigade.

The cobs at Longmoor therefore average at present a shade over 14 hands 8 inches, which is found a most useful size for the work. They show, moreover, a good deal more quality than formerly, the remounts bought during the last two years being particularly good. Several batches were received which from sickness and other causes were unable to proceed with shiploads to South Africa, having been originally bought for the Cavalry there ; and these are found most suitable, nearly all having been bought in Ireland and well selected.

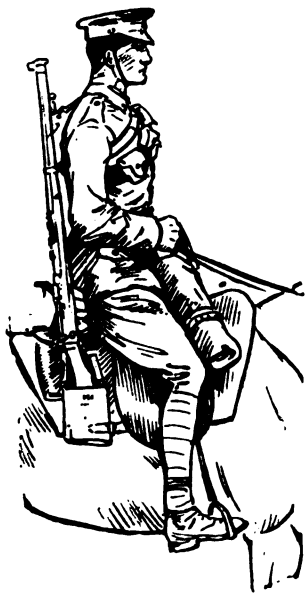


PLATE II.—METHOD OF CARRYING
THE RIFLE.

Each officer under training is allotted two cobs as his chargers, and these he may hire for general purposes, paying £2 10s. each for the three months' training.

A list is kept of the most suitable cobs, and many of them are quite extraordinary hunters, nor are some of their stable companions far behind them in prowess on the polo ground.

There are no rough-riders on the permanent staff, and a

remount has to pick up most of his education as best he can—though, if possible, he is given to an officer to train and condition before being put in the ranks.

THE TRAINING

The aim and object is that at the end of the three months' training all ranks shall have at least a 'smattering' of the following subjects :—

- Stable duties (both in stables and in camp).
- Horsemastership in all its branches.
- Riding.
- Drill.
- March discipline.
- Extended work.
- Advanced, rear, and flank guards.
- Outposts.
- Marching order.
- Reconnaissance, etc.

The first day is fully occupied in the handing and taking over of barracks, stables, cobs and saddlery between the incoming and outgoing detachments,* but on the second day the work begins in earnest.

All officers and N.C.O.s. are instructed in fitting saddlery and elementary riding instruction in the morning, after which the men have their first lesson in riding.

The first few morning stable hours are somewhat of a struggle, especially on the dark mornings during the winter months, but it is quite extraordinary how soon the men settle into the routine, especially if there happen to be two or three previously trained Mounted Infantrymen in the section. The system is very clearly laid down and strictly enforced.

* About forty officers and over 1000 men arrive, and a similar number depart, with all their baggage, on the first day of the training, and no advance party is possible.

As soon as possible all subaltern officers and N.C.O.s. are practically instructed in grooming a horse, and at the following stable hour the men receive a personal demonstration from their section officers. It should be here stated that at Longmoor the subaltern has to do everything himself before attempting to teach his men. Thus they do riding school, section and company drill in the ranks (with and without rifles), turn out in marching order, put down picket lines, groom a horse, &c.

But to return to the progressive scheme of work. Riding instruction usually lasts for about a fortnight or three weeks.



PLATE III.—NUMBERS '8.'

Then comes *section training* for another fortnight, followed by *company training* until about the end of the second month.

During section training the work is confined chiefly to simple drill, extended work, dismounting for action (Mounted Infantry Training Section 42, Methods 2 and 3) (see Plate III.), practising moving over rough ground, &c. The section commander during this time has a fairly free hand, and it is during this fortnight that his section is made or marred.

At company training a smattering of many things has to be taught, such as outpost duty, marching order, picketing,

advance, rear, and flank guards, in addition to some simple company drill.

The last month is almost entirely devoted to battalion training, which consists of drill, tactical exercises, and field manoeuvre, outposts, scouting, jumping, and picketing (combined with long distance marches in marching order), and once a week a brigade day under the commandant.

During each week of the training lectures on various subjects are given by the school and battalion staffs to all officers and N.C.O.s., and by company commanders to their subalterns and N.C.O.s. There is also a veterinary lecture, with practical demonstration once a week.

At the end of each training the commandant reports individually upon every officer—and a list of those specially selected for employment with Mounted Infantry is sent to the War Office.

Each N.C.O. and man is also reported on as to his qualifications in Mounted Infantry duties both in stables and in the field. (This goes to his regiment.)

RECREATION

Finally, a word as to the two not least important institutions at Longmoor, *i.e.*, the Drag Hounds and the Polo Club.

The former are kennelled in the camp, and hunt twice a week. Numerous excellent lines are obtained in the countries of the neighbouring hunts, viz., the H. H., Hambledon, Chiddingfold, and Lord Leconfield's.

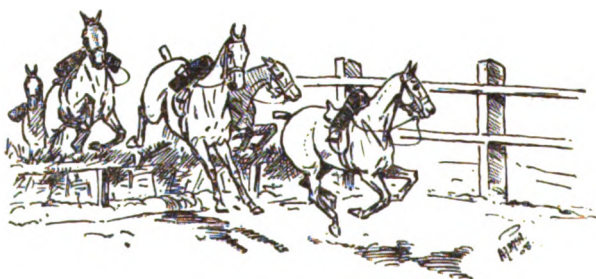
The pack was started in 1903 by Colonel A. J. Godley, then commandant, and has flourished ever since, being at present welcomed over the land of upwards of 450 farmers. Every officer of the Mounted Infantry is expected to go out with the drag, and the experience and confidence thus gained must be valuable to those who have possibly had little or no opportunity of hunting before going to Longmoor.

At the end of every winter training there is a point-to-point

race between the two training battalions for the Challenge cup, and for this everybody is expected to go to the post.

During the summer months polo is played three days a week on the excellent and picturesque ground in Blackmoor Park, only a mile from camp, which is rented from Lord Selborne. Here frequent matches take place, the inter-battalion Cup, the inter-company Tournament, &c., and a few outside matches as well.

This brings to an end a brief description of the only remaining Mounted Infantry School at home. Much could be written of the useful and interesting work which is done there from day to day, but space will not permit. In the next number of the CAVALRY JOURNAL it is understood that an article is to appear, discussing the tactical employment of Mounted Infantry in its newly assigned *rôle*, and this will be awaited with the greatest interest by all keen Mounted Infantrymen.





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Longmoor.



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TACTICAL OBSERVATION AND THE TRANSMISSION OF REPORTS

By **BRIGADIER-GENERAL E. H. H. ALLENBY, C.B.**

IN Section 146 'Cavalry Training' we read :—

'Whenever support is required by patrols, or when an enemy, who is still some marches distant, has to be observed for any length of time, whole troops or squadrons (called contact troops or squadrons) will be sent out to ensure permanent tactical observation of the enemy. These units will serve as a patrol reserve, as a support to the patrols, and as a collecting-station for information.'

How is this information to be conveyed to Headquarters ?

In 'Combined Training,' Section 95, paragraph 2, is written :—

'In every command some simple method of collecting and transmitting information should be established and constantly practised in peace.'

And in Section 97, paragraph 6 :—

'The officer commanding a reconnoitring body must ensure the rapid and safe transmission of his messages . . .'

What are the simple methods available ?

Section 147 of 'Cavalry Training' mentions :—

Despatch riders on horseback or on bicycles.

Signallers.

Field telegraphs and wireless telegraphy ; and, occasionally,

The permanent telegraph system and carrier pigeons.

It further says that 'connection between contact squadrons and the main body of the independent Cavalry must be very

carefully arranged by relays, whose strength must depend on the extent to which the district through which they will pass has been cleared of the enemy.'

It is generally agreed that of all the methods named above the most to be trusted is the first, viz. despatch riders. All may be useful at one time or another, and all have their limitations.

Signalling requires exceptional conditions of topography and climate.

Field and wireless telegraphy are bulky, and not always to hand when wanted.

The permanent telegraph can only be relied on when it is covered by our own troops, and thus safeguarded.

Carrier pigeons cannot be used to communicate with a moving base.

Despatch riders are, however, always able to work under any conditions, though this service puts a severe strain on men and horses, and auxiliary means must be freely utilised if possible.

It is as well to assume that we are working in an enemy's country, where the inhabitants are unfriendly and the language is unfamiliar.

In one's own country the task would be simpler.

Let us take the case of an enemy several marches distant—say 70 miles—whom it is necessary to observe for a period.

A contact squadron is sent out 'to ensure permanent tactical observation of the enemy.' It will act as a support to its tactical patrols and as a collecting station for information. In this latter capacity it may act too for any strategical reconnoitring detachments that may be further afield.

However, these may be behind the network of the enemy's protective troops, and connection with them by means of relay posts may not be possible.

But it is essential that frequent reports are obtained from the tactical patrols, and transmitted to the main body without loss of time.

Suppose that our patrols are observing the enemy on a front of some 12 miles, and that our contact squadron is 10 miles in rear of the line of patrols.

The squadron will then be 60 miles from its starting-point, and 11 to 12 miles from its right and left advanced patrols.

The pace of the trot is, by regulation, 8 miles an hour ; but that is a high rate of speed to keep up continuously on a road. To maintain such a speed, hourly changes of horses would probably be necessary. Not more than six miles an hour could be counted on in reality.

Say that a relay post is established at every twelfth mile between the contact squadron and the main body—four posts in all. What will be the strength of each post ?

Each post must be strong enough to defend itself from attack by small parties.

It must keep a lookout all day and all night.

Two horses must always be ready to carry on despatches to the next post, as despatch riders will usually travel in pairs.

At least one man should be ready at any moment to take the place of an exhausted or disabled despatch rider. (In emergency, he may be one of the sentry reliefs.)

There must be a Commander of the Post, who will keep a record of messages and a diary of events.

Thus we need,

1 Commander	.	.	.	.	.	.	1
1 Sentry (in 3 reliefs)	.	.	.	.	.	.	3
1 man in charge of horses	.	.	.	.	.	.	1
1 available relief despatch rider	.	.	.	.	.	.	1
							<hr/>
Total	.	.	.	.	.	.	6
							<hr/>
Total for the 4 posts	.	.	.	.	.	.	24

Probably a section—eight men, including the leader—would be the minimum in practice ; then the total for the four posts would be thirty-two.

In addition to supplying men for the relay posts, the squadron has to support its patrols, to find despatch riders, to provide for its own security, and to replace casualties.

If the inhabitants are very aggressive, or there are many hostile patrols about, we may have to increase the strength of the relay posts ; or we may combine the strength of two posts in one. This latter procedure, though it strengthens the line, increases the distances, and lessens the speed at which reports are passed along.

As it is, reckoning on the speed of six miles an hour, and allowing for no delay at any of the posts, a report from the advanced patrols would take twelve hours to reach the main body. It must be borne in mind, too, that as the distances between relay posts increase, so does the danger that despatch riders may lose their way.

If bicycles can be largely used, transmission of reports is greatly facilitated and accelerated.

On roads that are broad, direct and good, cyclists have a very great advantage over horsemen as messengers.

If, however, roads are narrow, tortuous, and bad, their advantage disappears in a great measure.

In narrow roads the cyclist, even if armed with a pistol, is practically defenceless against a sudden rush by a man armed with a pitchfork from behind a hedge.

A horseman can, at a pinch, always charge an assailant.

Further, the man on the horse can see over the hedges, which fact, besides being of practical advantage, gives him a feeling of moral superiority.

But a line of relay posts is generally along a good road, and then bicycles are of very great value. When roads are good, it should be a rule that a horse must never be sent to the rear if a bicycle is available.

Amid a hostile population, the vicinity of towns and large villages should be avoided by relay posts. Unfortunately, the junction of the main roads often coincides with the sites of towns

and villages ; and unless posts are at or near road junctions, distances to be covered by patrols are increased and it is not so easy for despatch riders to find their way. However, the posts must keep a sharp look-out. If they do this, despatch riders who are really well up to their work and can read maps intelligently should be able to make sure of finding them even if in a hidden position.

It is very important that all despatch riders and relay posts should be provided with good maps.

To ensure, as far as may be, a knowledge of the country, it should be an invariable rule, in establishing a line of relay posts, that the exact position on the map of each as it is posted is carefully explained to all concerned, and that the roads and distances to the adjoining posts and chief localities are indicated at the same time. The men who are to form the next post that will be dropped should be told off before leaving the previous one, and they should study with care the road and the country as they traverse it on the way to their post. Each post ought to be informed of the subsequent probable moves of the squadron.

In an enclosed country, with many cross-roads, some men always lose their way. This happens to despatch riders even in peace exercises at home. In a foreign land, with awkward names to remember and strange maps to consult, where the natives are unfriendly and speak an unknown tongue, it will occur not less often. Therefore it is unwise to trust to single messengers. They should travel in pairs, each having a copy of the despatch ; and, in cases of very great moment, these pairs of riders may be duplicated where roads allow.

A good way of sending an important message over a long distance is to requisition a cart, and force an intelligent citizen to drive it and act as guide. The despatch riders escort the cart, or ride in it, with their horses tied behind.

This method facilitates, too, the sending in of prisoners ; it is also useful when registers or bulky documents have been seized and are to be sent in.

We have taken a straight and easy line for our relay posts, from a stationary starting-point to a stationary objective.

If the enemy, or our own main body, or both, be in movement, the situation becomes more complicated.

If our main body is following the contact squadron, the relay posts are rolled up, and distances are shortened.

So, too, if the enemy advances.

Supposing, however, that the squadron's original line of advance was from south to north, and that the hostile body it is observing moves from west to east, while the general trend of our main body may be from east to west. Then any fixed chain of relay posts is at once broken. Even if they were rightly placed to-day, they will be wrong to-morrow.

In a contingency of this sort, it may be better to fix a few places on main roads where connecting posts of considerable size may be established either by the main body or the contact squadron, or by each. These posts will be relieved or changed from place to place, as required by the situation, under the superintendence of a Staff Officer charged with the duty of maintaining communication with the officer commanding the contact squadron.

The main body can, on occasion, throw out relay posts to relieve or extend the line of those belonging to the contact squadron. If cable-carts are available, each, with its ten miles of cable, will shorten the time occupied in transmitting a despatch by at least one and a quarter hours.

Without the aid of mechanical means, the powers of a Cavalry detachment are soon exhausted.

It is instructive to consider time, space, and personnel.

Supposing, on a front of 12 miles, 4 or 5 tactical patrols of a section each ; total, 32 to 40 men. Also relay posts over 60 miles, say four sections ; total, 32 men.

Also protective patrols and march outposts to the squadron, say 2 sections ; total, 16 men.

Also despatch riders daily ; 6 men at least. (These may be replaced from the rear, but this cannot be counted on.)

We arrive at a total of from 86 to 94 men.

This allows for no casualties ; but, even so, a very small nucleus is left for supports to patrols, for finding special despatch riders to carry messages of exceptional importance direct to Army Headquarters, or for any work outside the ordinary routine. The drain of despatch riders alone would, in a very few days, reduce the squadron to inefficiency.

If these calculations are approximately correct, it would seem that 70 miles is the extreme radius of action, in ordinary circumstances, of a contact squadron, and that three or four days of contact would be as long as efficiency could be maintained by it.

As to intercommunication between contact squadrons, where more than one is employed, they cannot be expected to arrange for lateral communication between each other. They have more than enough to do in other ways.

Information as to the positions and movements of the various parts of the force must be supplied to the contact squadron from the main body.

This should be the duty of the Staff Officer detailed to arrange for the maintenance of communication with the contact squadrons.

A RIDE IN THE BALKANS DURING THE CRISIS

By **LIEUTENANT BERTRAND STEWART**, *West Kent Yeomanry*

THE railway to Athens, it is said, will be an accomplished fact within the next few years, but in the meantime the P. and O. Express to Brindisi and the steamer thence to Patras take one very comfortably from London to Athens in rather less than four days. One can spend also the greater part of one day at Corfu in driving along the excellent roads—relics of the British occupation.

After seeing something of the Greek Army Manœuvres, I left the Piræus by fast steamer and landed within twenty-four hours at the old walled town of Salonica, the political aspect of which has, no doubt, changed greatly since the grant of the Turkish Constitution. It is the head quarters of the 3rd Turkish Army Corps, and also the head quarters of the Macedonian Gendarmerie, the Italian General Officer in command residing in the town. The Gendarmerie School, under the command of Major A. A. L. Stephen, D.S.O., Scots Guards, is situated just outside the walls. Through this School pass all the recruits destined for the ranks of the Gendarmerie. While I was there the fast of 'Ramazan' was in progress, but this seemed to disturb but little their course of instruction, since lectures and other work were carried on throughout the night—Major Stephen making the very most of the time at his command.

The British section under Lieut.-Colonel Bonham, Grenadier Guards, includes the country round Drama and Kavala to the east of Salonica. Two of the Turkish officers to whom I spoke paid a high compliment to Colonel Bonham, Major Stephen, and

the other British officers for the excellent work they had done with the Gendarmerie.

Having decided to travel northwards and see something of the Novi-Bazar district and the line of the much discussed railway, I left Salonica for Uskub on the morning when the declaration of Bulgarian Independence was announced. From my conversations with Turkish officers it was evident that they felt the declaration deeply; one could not but admire, however, their outward calm. That there was more in the wind was clear, for not only were the Austrian officers of the Gendarmerie hurriedly leaving, but the wives and families of the officers of the Austrian garrison in the 'Sanjak of Novi-Bazar' had been sent into Bosnia.

Since night travelling is, for obvious reasons, not thought advisable, all trains start from Salonica in the early morning. They carry a detachment of Gendarmes ready for any emergency.

The railway is a single line from Salonica to Nisch, where it joins the main line from Belgrade to Constantinople. It was by this line that the Servians, when the Austrian railways were closed against them, recently brought up their new Creusot batteries and other Artillery material. Uskub, which is strategically an important place, has a considerable Turkish garrison, and here the railway to Mitrovitza branches from the main line to Nisch. Close to the railway, some miles to the south of Uskub, some large Cavalry barracks are situated.

Next day, after another railway journey of seventy-five miles, which, however, takes six hours, the rail-head at Mitrovitza is reached. This town, which was the head quarters of two battalions and two batteries, but is now, according to the Press, increased by several battalions, lies in a broad valley and at an altitude of 1800 feet. There is both an Austrian and a Russian Consul in the town. The first foreign Consul, who took up his quarters in the town a few years ago, was murdered by the Albanians within a very short time of his arrival, and the Austrian Consulate is now continually guarded by Turkish troops.

Accompanied by two Turkish Gendarmes, and riding a native pony of twelve hands, I started off the next morning intending to follow the main track to Novi-Bazar. For the first four miles the track runs down the valley of the Ibur, then turns north-west, and after a climb of about 1000 feet descends into the valley of the Banjska, a tributary of the Ibur, once guarded by an old walled fort which still remains intact. From there a long climb of some 2000 feet begins, and then the track for some distance continues along the high ground within a few miles of the Servian frontier. The valleys are heavily wooded, but the high ground is bare and stony. After a sharp descent one reaches Novi-Bazar (alt. 1850 feet), a busy town of some 17,000 inhabitants, lying at the junction of four valleys and on the banks of the Raska River. A small Turkish force, which is quartered in an old fort, forms the garrison.

From Novi-Bazar the track follows for some miles the valley of the Ljudska and is excellent. After this the valley becomes narrow and the track runs through some large woods. I was warned here to ride on the *qui vive*, for one man had been killed and another wounded on the previous afternoon. Though our possible assailants had the advantage of being able to snipe from behind trees at short range, the Gendarmes professed to having no very high opinion of their marksmanship, but still were very loth to halt and water the ponies.

After a long climb we reached a village, and found a gathering of about 200 men, all armed with modern weapons, either rifles or revolvers, and all with well filled bandoliers. Apparently no one except a Christian ever moves about this country unarmed. All these villagers were fine looking men, of splendid physique, and apparently capable of great endurance. For instance, the man to whom my ponies belonged marched thirty miles a day for four days in a hot sun; all this, too, without touching food or water, because it was during 'Ramazan.' There is no doubt that if a sufficient number of these men were mobilised—and apparently there are arrangements for doing this

—they could, if properly led, make a most stubborn resistance to any advance in ‘the Sanjak.’

Just above this village we reached the crest of the hill, and here in a moment the Pestera, a wonderful country, opened before us—a great rolling plain, with streams here and there, extraordinarily like the veldt except that there are no kopjes. It is a splendid country for Cavalry, but the great difficulty would be in getting them there, since this horseman’s paradise lies surrounded for many miles by rough mountainous country. But the joy of Cavalry on reaching it would be unbounded—even the ponies, tired after a long hot day, seemed to feel it and immediately broke into the one and only canter of the whole march. Perched on some high ground, and commanding a splendid view of a long stretch of the Servian frontier, was a Turkish guard-house with its garrison of five or six men. Its system of telegraphic communication with a neighbouring garrison, though not yet by ‘wireless,’ was certainly not out of date. On the opposite side of a valley was another white hut marking one of the posts of the Servian frontier guards, some of which are also connected by telegraph or telephone with the interior.

The second night I spent in Sjenica, entertained by the Governor and the officers of the Turkish garrison. We visited the first club which had ever been started in Sjenica, and found it full of officers and officials engrossed in the latest news. Such a place as a club was, of course, forbidden here before the grant of the Constitution.

From Sjenica to Prijepolje is certainly the most difficult section of the route, whether for the construction of the new railway or the passage of troops by the existing tracks. If a railway and road were constructed, the advantage which the great natural barrier of ‘the Sanjak’—and particularly this section of it—now affords would be very materially lessened. One track within about twenty miles rises from 3000 feet to nearly 5000 feet, drops to 3500, rises at once to nearly 4700, and drops again to

2800 feet. In the middle of this march I met a party of the Austrian Engineers moving eastwards. They brought with them the news of the actual annexation and a rumour that Servian troops were massing on the frontier. Reaching Prijepolje that night—the most easterly of the Austrian garrisons which were sanctioned by the Treaty of Berlin—I found the Austrian Infantry ready to fall back at an hour's notice on their main garrison at Plevje, preparatory to a final evacuation of 'the Sanjak.' The rumour of a Servian Division being on the frontier was again current, and, as it was said to have been confirmed by reliable information, I set off as fast as I could go for the Servian frontier, crossing the mountains by the roughest of paths to Novavaros.

After gathering such information as was possible here, I rode for a considerable distance along the Servian frontier, which in this district is extremely mountainous and quite unsuited for any troops except Infantry and Mountain Artillery, and even these would be handicapped if accompanied by anything but pack transport. The River Uvac, which for some distance forms the boundary, runs in one place in a gorge 1500 feet deep. Here and there along the line are the guard-houses of the two nations.

Across the Servian frontier there was considerable excitement, particularly in the towns, and the talk on all sides was of war. Everyone seemed to realise that the nation's hope of reaching to the sea had been thwarted—possibly for ever. Fortunately, however, for the interests of peace the rumour that a Division had been moved to the frontier was not confirmed by fact; and, as time went on, so the more responsible Servians came to see that, though a war would afford certain chances of success, it would be more likely to bring disaster. Whether this was the worst moment of the crisis remains as yet to be seen.

At Priboj one finds the last Turkish garrison and, within two miles of their barracks, the frontier bridge with a Turkish guard at one end and an Austrian at the other. The terminus of the railway at Uvac is within a few hundred yards of the frontier, and good accommodation has been provided here by the Austrians for the detrainment of troops.

This Eastern frontier railway—looked at from a strategical point of view—is particularly interesting, because it provides a line of advance from Serajevo, not only to Uvac on the Turkish frontier, but to Visegrad on the Servian frontier. The line has been constructed for little else but military purposes, and for a small gauge railway in a mountainous district is certainly a model one. There are twelve stations, from five to eight miles apart, and at each there are facilities for trains passing each other, as well as ample siding accommodation; there are no crossing places between stations. All the station buildings are fortified, being lined with steel plates, having sliding panels over the loopholes. The gauge is only 29 inches but most of the covered wagons are capable of carrying twenty-four men or four horses. The rails in use weigh 43 lbs. per metre; the maximum gradient is 1 in 55, and the minimum curve 175 metres. This frontier railway has also been so constructed as to facilitate a conversion to normal gauge, and it is interesting to notice that it is proposed to make the Novi-Bazar Railway of normal gauge, thus enabling rolling-stock to pass from Uvac to Salonica, or, if the Serajevo-Uvac Railway is enlarged, from Serajevo to Salonica. There are no less than ninety-nine tunnels on the frontier line, and at the time when I passed not only were nearly all of these guarded by Infantry, but all the bridges and important points on the line were guarded too, and beyond this there was a garrison at each station. Continual patrols were passing to and fro, and the whole line was under far greater surveillance than any portion of our railway during the South African War.

Reaching Serajevo, the town surrounded by fortresses, my journey came to an end.

Admitting that the making of a railway from Uvac to Mitrovitzza would be difficult and costly—though not to the extent which has in some quarters been stated—there can be no doubt that its construction is possible and its strategic value great. It remains to be seen whether it will receive the assent of the Turkish Government.

THE COMBINATION OF SHOCK WITH DISMOUNTED FIRE ACTION

AN IDEA

By 'BENGAL LANCER'

It is an axiom that the charge of Cavalry will be most effective if carried out in combination with fire—artillery or rifle. The difficulty lies and always will lie in bringing off the combination, and in seeking means to do so it is first necessary to be quite sure in what regard and to what degree the one (fire) assists the other (shock).

What is it we expect from fire? Material damage which shall lessen the numbers of opponents to be charged? Or moral effect caused, if not by losses, then by surprise?

Taking into consideration the brief and fleeting chances and difficult targets open to fire, one may be inclined to discard material damage as being too improbable, and accept the theory of the moral effect. But whatever the verdict, there will be one result common to both and inevitable in greater or less degree to probably even the best troops—and that is disorder.

Disorder will be greater or less according as the damage is severe or slight, the troops good or indifferent; it will be temporary—even momentary—when the effect is merely moral, such as that caused by an unexpected burst of rifle fire. But disorder there almost surely will be, and this, and this only, is the factor which may be counted on in determining the manner and degree in and to which fire assists shock.

It follows then that shock, if there is to be combination of effect, must take place while disorder, however brief, exists in the opponents' ranks. And, therefore, the mounted portion in order to play its part must be in such a position and in such formation that it can charge at the moment the disorder is created or is in being ; if it fail in either it might as well keep its fire unit with itself to swell the impetus of the shock, or if artillery is the fire medium preserve it from the risk of capture. Now as to the means of obtaining the much desired combination. It has been suggested that incidence of ground, such as hill features, clumps of trees, nullahs, &c., should be utilised for the disposal of the dismounted men while the enemy is manœuvred towards them—and if possible across their front—by the mounted portion of the force.

This sounds all right till we come to practice, when the following questions arise :—

(1) Can features of the ground be so utilised without relying on the incompetence of the opposing leader—not usually a sound assumption to work on ? Will any leader who knows his work allow himself to be manœuvred to the neighbourhood of anything so likely to hold or cover dismounted men ?

(2) Allowing that such a confiding leader may be found or that some feature such as a nullah which the enemy cannot see be utilised, can the manœuvring commander hope to get the enemy within effective range of his dismounted men and be in such a position himself that on fire opening he will be within easy striking distance, and in such a formation that he can easily form line and charge ? Or will he more probably find that in his efforts to manœuvre the enemy to the desired spot he has his own rear towards or nearly towards him (necessitating a wheel about and probably a formation of line) plus a long distance between himself and his opponent ?

(3) Supposing even that his command is so perfectly disciplined that he can trust his back to the enemy within, say, 600 or 700 yards of him, and that it can drill so perfectly that he

can wheel it about, form line and charge with cohesion under such exciting conditions, will his attack, though it may catch the enemy in disorder, be made in the best direction, *i.e.* on the flank or partially on the flank of the enemy ?

At the expense of reiteration, it must be always remembered that dismounted fire, probably slight in its material effect, will lose its moral effect very rapidly and that the mounted force must be near enough to the enemy to charge before the disorder is remedied ; and, if near enough to gain this advantage, simple movements only can be executed or there will be loss of cohesion in the charge.

The following idea is submitted as a method of surprising an enemy by dismounted fire and then charging him. It was worked out against mobile flags and against stationary targets with one squadron only ; its application to larger units was not attempted. The substitution of a Maxim for the firing troop could not be tried, as such a gun does not at present form part of the writer's regimental equipment.

The idea is independent of incidence of ground and requires only the ability to dismount and open fire quickly, and the fairly accurate drill of two very simple movements. Its essential points are (1) the firing troop must be dropped ; it matters not whether on open and flat country, in a nullah or fold of ground, or behind a hill ; but *dropped* it must be to deceive the enemy. (2) The mounted portion in front must assume such a formation and be in such a position that nothing more than a wheel of troops will bring them into line for the charge.

IDEA

Two squadrons meet on an open plain or anywhere. The opposing forces being equal, 'A' squadron attempts to gain an advantage over 'B' squadron by combining the fire of one troop with the shock of a charge by the other three.

Supposing a collision is intended by both, 'A' and 'B' would ordinarily be in squadron columns till within 500 or

600 yards of each other. 'A' squadron at this distance, irrespective of whether 'B' is still in column, is forming line, or is actually in line, goes 'Head half right (or left).' This is best done at the walk or slow trot, as it gives the rear troop more time to remain covered from view while dismounting and preparing to fire. The command 'Head half right' is the signal for the rear troop to dismount rank entire, reins over arms. The action, if done smartly, is finished and complete before the third troop has, by its change of direction, uncovered the fourth. By the time the front of the fourth troop is entirely clear and with a little to spare it should be ready to open fire on 'B' squadron, now probably within 400 or 350 yards. The object of the fire, which should be poured in with the utmost rapidity, is to throw 'B' into disorder, however slight, or to momentarily check it, while the three troops left (or right) wheel into line and charge from the half flank.

The above carried out against galloping flags had the following results:—The dismounted troop fired from two to four rounds of blank cartridges per man before their front was covered; the charging troops invariably caught the flags before they came within 250 yards of the dismounted troop.

To prove the probability of the rear troop's fire having any material effect upon 'B,' to put its fire discipline to a fairly high test, and finally to exercise the remainder of the squadron in accurate drill under conditions of noise and excitement, the idea was carried out as a field firing practice.

Eight screen targets, 8 feet by 3 feet, to represent the frontage of a twelve-file troop only were placed on perfectly open ground. 'A' squadron started in column of troops and worked out the idea in its entirety. On the first occasion the firing troop put thirteen hits on the targets, the distance being about 400 yards; on the second, distance being somewhat greater ('Head half right' being given too soon), eleven hits were made. In each case the fire of the fourth troop was switched off in good time to prevent chance of harm to the mounted troops, which, the moment

fire was opened, wheeled into line and charged the targets. (It was pointed out, of course, that a real 'B' squadron would have been much nearer than the targets.)

The criticism on the above by one wholly competent to give it was that the fire of the fourth troop was far too weak to cause 'B' damage, and that this troop would have been better employed in the charge. But the writer's argument, based on two actual (and painful) experiences in war, is that material damage is not necessary to ensure success, but that the moral effect of surprise is the element which produces that disorder of which it should be the aim of Cavalry to take the utmost advantage.



1st (ROYAL) DRAGOONS.

We are much indebted to Mr. Harry Payne for the above illustration, which will also be utilised for the front page of cover of the four numbers of the present Volume.

THE LIGHT HORSE OF AUSTRALIA: THEIR ORGANISATION AND TRAINING

By CAPTAIN C. B. B. WHITE, *p.s.c.*, *Royal Australian Artillery*

Organisation.—Prior to Federation each of the Australian Colonies raised forces under the system which they considered best adapted to fulfil their requirements. Each of the Colonies possessed mounted troops—Militia or Volunteers—and the heterogeneous body handed over to the Commonwealth ranged from Mounted Infantry pure and simple to Cavalry (Lancers). The organisation of these several bodies varied according to the ideas of the Colony in which they were raised. Regiments or battalions contained a varying number of squadrons or companies, and little, if any, attempt had been made to localise units or to create higher formations. The task before the Headquarters of the Commonwealth military forces was, therefore, no easy one. Gradually, however, order came out of chaos, and eighteen regiments of mounted troops made their appearance. Lieut.-General Sir Edward Hutton, who organised the military forces of the Commonwealth, always held that the irregular horsemen of Australia were capable of, and would in war have to perform, duties of a more extended nature than those within the power of Mounted Infantry, and he gave to them, therefore, the title of Light Horse. H.R.H. the Prince of Wales has been graciously pleased to accept the Colonelcy-in-Chief of all these regiments, and the 1st, 2nd, 3rd, 4th, 5th, and 6th Australian Light Horse Regiments, New South Wales, have recently been allied to the King's Colonials Imperial Yeomanry.

The eighteen regiments, which are raised on a Militia basis, have been organised in five Light Horse Brigades, consisting of three regiments (with the exception of the 4th Brigade, which at present has only two regiments) and other units, as set forth below. These Light Horse Brigades form part of the Field Force allotted to the State in which they are raised; and it will be remembered that the Australian forces are subdivided into a Field Force and Garrison Troops, the latter furnishing the garrisons of defended ports in each State. Thus are incorporated fourteen regiments out of the eighteen, the remaining four being allotted to mixed Brigades in South Australia, Western Australia, and Tasmania. A comparison of the following tables shows the similarity between these Australian Light Horse Brigades and the Mounted Brigades which form the protective or Army Cavalry of the Imperial organisation.

WAR ESTABLISHMENT

<i>Australian L.H. Brigade</i>		<i>British Mounted Brigade</i>	
Headquarters	38	Headquarters	38
3 L.H. Regiments	1,575	1 Cavalry Regiment	541
1 Battery of Artillery	154	2 Mounted Infantry Battalions	1,276
1 L.H. Brigade Ammunition Column	92	1 H.A. Battery	219
1 Field Troop Engineers	63	1 Mounted Brigade Ammunition Column	123
$\frac{1}{2}$ Company Signallers	19	1 Mounted Brigade T. and S. Column	122
1 L.H. T. and S. Column	103	1 Cavalry Field Ambulance	120
1 L.H. Field Ambulance	110		
Total	2,154	Total	2,439

Each State in Australia forms a military district, and these Brigades are distributed throughout the States thus:—

New South Wales	1st Brigade : 1st, 2nd, and 3rd Regiments.
	2nd Brigade : 4th, 5th, and 6th Regiments.
Victoria	3rd Brigade : 7th, 8th, and 9th Regiments.
	4th Brigade : 10th and 11th Regiments.
Queensland	5th Brigade : 13th, 14th, and 15th Regiments.

Each regiment consists of four squadrons, together with a pom-pom and machine gun (Colt or Maxim) section—a total of 312 on a peace and 525 on a war establishment. The peace establishment of a squadron numbers seventy-two, and the war establishment 112 of all ranks.

Fifth and sixth squadrons of some regiments have been raised, and these form part of the garrisons of the several defended ports.

The cohesion implied in the representation of this organisation on paper is not quite as real as could be wished ; for it is to be remembered that the State of New South Wales alone is half as large again as France, and the distribution of the population has made it necessary to raise troops of the same squadron, and squadrons of the same regiment, within circles of very large radii. It will be readily understood that there are great difficulties to be overcome in arranging administration so that the organisation may be something more than a paper one.

The Light Horseman provides his own horse, saddle, and bridle, for which he receives yearly an allowance of £1. The Commonwealth Government are arranging to issue bridles, and an issue of saddles is one of the probabilities of the early future.

Training.—It is intended here to indicate briefly the nature and extent of the yearly training of the Light Horseman, and to conclude with a short description of the work effected at a Light Horse camp of continuous training held at Liverpool, in New South Wales, between August 11 and 21, 1908.

To become an 'efficient,' i.e. to earn the whole of the pay provided, a man is bound by regulation to 'put in' an equivalent of twelve days, made up as follows :—

- (i) Continuous training and exercise for not less than four or more than eight days in camp or bivouac, at such time and place as may be ordered.
- (ii) Whole-day, half-day, and night parades, as ordered, to make up twelve days, but not more than sixteen night parades will be allowed to count. District Com-

mandants determine the allotment of parades under this sub-section.

- (iii) Prescribed course of musketry.
- (iv) Annual inspection by Commandant, or his representative, which will be carried out at any parades mentioned in (i.) or (ii.).

The night parades are usually carried out in drill-halls, where the more elementary work is effected. The whole- and the half-day parades are usually spent in field exercises, but owing to the distances separating the component parts of the regiments it is not often possible to get together sufficient men to make the work as valuable and instructive as could be wished.

The amount of training prescribed by regulation is confessedly small, and is less than the period which should be regarded as a minimum. Fortunately, it does not comprise the whole of the work carried out by the man, for the obligatory number of afternoon and evening parades is greatly exceeded by the majority, whose zeal and enthusiasm leave little to be desired.

Unfortunately, the British text-books do not include a Light Horse training manual, and in consequence one has been compiled locally, which is more or less a compromise between 'Cavalry Training' and 'Mounted Infantry Training.'

An annual field training, which is not to be considered in the light of elementary or recruit training, is included in the curriculum. This training is not continuous in the sense that the men devote the whole of a number of consecutive days thereto. But it is made as far as possible a connected period, and spread over such a length of time as will make its completion by all men of the unit a possibility. Included in the training are exercises in attack and defence, the application of tactical principles, and field firing with ball ammunition. At the conclusion of the training units are examined by the District Commandants or officers of their Staff, and the results achieved are recorded.

Classes of instruction are held from time to time in each State under arrangements made by District Commandants. The courses are classified as: Class 'A' for senior officers, staff and specially selected officers, and Class 'B' for squadron officers, warrant and non-commissioned officers. Examinations are held at the conclusion of each course, both practical and theoretical, and certificates of proficiency are awarded in recognised form. 'A' classes are for periods of four working days, or a minimum of thirty hours; 'B' classes are held for periods of ten working days, or a minimum of seventy-five hours.

An officer of the Instructional Staff—a staff of regular officers distinct from the permanent administrative staffs—is allotted to each Light Horse Brigade, and is responsible for the training and instruction of both officers and men.

Officers are required to pass a prescribed examination before promotion to higher rank, and to aid them in preparing for such examinations Instructional Staff Officers hold periodical classes.

A non-commissioned officer of the Instructional Staff is allotted to almost every squadron, and he is responsible for the training of N.C.O.s and instruction of men.

N.C.O.s are also required to pass examinations before promotion to higher rank, and similarly they are aided in preparation by the N.C.O.s of the Instructional Staff.

THE LIGHT HORSE CAMP OF CONTINUOUS TRAINING HELD AT LIVERPOOL BETWEEN AUGUST 11 AND 21, 1908

Last year the six Light Horse regiments in New South Wales had to forgo their annual camp of training. Excessive demands upon the Railway Department for the movement of sheep and cattle deprived the military authorities of the rolling-stock necessary for concentration. This year, therefore, the Light Horsemen were given a ten days' training, and on August 11 they began to assemble at Liverpool, some by route march occupying several days, others by train.

The great distances in Australia are little realised in England, and, it will, no doubt be a surprise to their comrades in the old country to learn that the 5th Light Horse Regiment, who come from the North-eastern extremity of the State, had to negotiate a journey of over 400 miles by road and rail to concentrate. They were in consequence absent from their private occupations for almost a month; and this must be regarded as a very satisfactory evidence of their zeal, especially since they only receive pay for the actual number of days in camp.

The District Commandant commanded the camp and the two Brigades were temporarily formed into a Light Horse Division.

Each Brigade was complete with its own Light Horse Transport and Supply Column and Light Horse Field Ambulance, and the presence of these units afforded a valuable illustration of the organisation.

The camp, nestling in the valley of the George's River, some twenty miles from Sydney, made a pretty picture, and the neatly kept lines, with their whitewashed heel pegs, were a credit to the troops.

Naturally an indifferent horsemaster, the Australian Light Horseman can, however, be disciplined to care properly for his horse, and it was a pleasure each morning to see these khaki-shirted men grooming and tending their horses like regular Cavalrymen.

One day only was devoted to drill and movements of precision. Upon this occasion the regiments were reviewed by His Excellency the Governor-General and His Excellency the State Governor. Troops marched past, and their Excellencies subsequently congratulated the Commandant and the Commanding Officers upon the soldierly, workmanlike appearance of the troops, and a notification of the assembly was sent to H.R.H. the Prince of Wales, their Colonel-in-Chief.

A manœuvre area of 25,000 acres, which has been acquired recently, afforded facilities for effecting field-firing practice with ball ammunition, and for three days the woods re-echoed with

reports of field guns, pom-poms, Colts, and rifles. The practices were all based on a tactical scheme and the targets were reconnoitred in a servicelike manner. Observation of fire was a matter of some difficulty owing to the soft nature of the ground, but the results of the practices were eminently satisfactory.

On the 17th instant the 2nd Light Horse Brigade marched some twenty miles out of camp to a destination unknown to the 1st Light Horse Brigade. They were moving into bivouac at a locality from whence they were to assume the character of a force whose object it was to raid a supply dépôt at Liverpool. The protection of this dépôt was the duty of the 1st Light Horse Brigade. The resultant operations were full of interest and cannot fail to have been instructive, approximating as closely as they did to active service conditions. The Brigadier of the 2nd Light Horse Brigade decided to strike at a flank of the probable position of the protecting Brigade, and moved through the somewhat close country by an indifferent and narrow track. The absence of information from patrols despatched along more probable avenues of approach caused some consternation in the minds of the 1st Light Horse Brigade. Towards midday, however, the hurried retreat of a patrol brought news of the enemy's near approach. His advance was made with vigour and resourcefulness which would have done credit to the gallant Ashby, and before long the crackle of blank in the bush country showed that the 1st Light Horse Brigade were not afraid to take all the risks and uncertainties of bush fighting. The attackers were, however, hardy horsemen, well used to the bush, and some of them at least realised the difficulties of frontal attack. The left flank of the defenders had moved forward when the fight commenced from the protection afforded it by a narrow stream, whose difficult banks and numerous quicksands made a formidable obstacle. At this flank the attackers struck persistently, and the despatch of a regiment to the hither bank was ordered too late to be completely efficacious. The attackers were on their mettle; they realised the value of their position and, nothing daunted, rode

their horses into the stream under cover of fire of their comrades. The hour set forth for the termination of the day's work came all too early for these intrepid fellows, for no sooner had they established themselves on the defender's bank than the umpire's whistles proclaimed a truce. Wet, cold, but exultant, they returned to camp, where the day's doings were for many hours the only topic of conversation.

The conclusion of the camp was made coincident with the arrival of the American Fleet, and the Brigades moved by route march to a camp in Sydney in order to be present at the Review held on August 24 ; 13,000 troops took part in this Review, and the Light Horse Regiments marched past with a total strength of 1,750. This after an arduous training must be regarded as a highly creditable performance.

***A SHORT ACCOUNT OF THE CAVALRY WORK
DURING THE OPERATIONS OF THE MOH-
MUND FIELD FORCE, 1908***

By **BREVET-COLONEL C. B. UNWIN, D.S.O.,** *Commandant
21st Prince Albert Victor's Own Cavalry*

THE operations having been fully described in Lieut.-General Sir James Willcock's despatches, it is unnecessary to recapitulate them in the form of a diary, and I will, therefore, confine myself to incidents and questions which may be of interest from a purely Cavalry point of view.

At 2 A.M. on April 20 the 21st Cavalry received orders to mobilise two squadrons and march to Shabkadr, a frontier outpost in the Peshawur district, which had been recently strengthened on account of disturbances on the Mohmund border. Headquarters and two squadrons left Nowshera Cavalry cantonment the same evening, marching all night, and reached Shabkadr early on the morning of the 21st—distance about 88 miles.

At 16 miles, near Charsadda, the Kabul River was crossed by a ferry-boat, the bridge of boats having been carried away by flood. Only one boat was available, worked backwards and forwards on a hawser. On arrival at the bank we found this had been decked flush with the gunwale with loose planks, and level with the improvised deck a ramp had been made which admitted of animals being marched straight on to the boat. A discussion then took place as to whether this method was safe, the majority of officers urging that horses were liable to get

frightened and fall overboard into the stream, which was very rapid (so much so as to render swimming horses, especially at night, undesirable). It was eventually decided to remove the planks and jump animals into the boat. This necessitated a drop of about 2 feet 9 inches.

Subsequent events proved that this was an unnecessary precaution, as a few days later the Guides Infantry crossed all their baggage animals over without any accidents by walking them straight on to the decked boat. In our case horses got rather knocked about jumping in and out of the boat, and, moreover, the surface area being larger, more animals could have crossed at a time by not removing the deck. The crossing took nearly eight hours, including baggage mules.

On arrival at Shabkadr the two squadrons were distributed along the defensive outpost line on the Mohmund frontier, being reinforced by the remainder of the regiment a few days later. The first event of interest occurred on the night of April 22-23, when the camps at Mutta and Garhi Sadr were fired into, and some of our horses and those of the 19th Lancers (Fane's Horse)¹ broke loose owing to the softness of the soil and pegs giving way. The following is an extract from Captain Jackson's squadron diary: 'Some horses galloped over parapet and broke down barbed-wire entanglement. Some made off in direction of Abazai and Garhi Sadr, others towards enemy's position, from which heavy firing could be seen and heard. Enemy who were attacking Garhi Sadr in force, thinking a Cavalry charge was taking place, ceased their attack and retired to hills. Our losses in horses four killed and six missing. The soil was sandy and picketing pegs gave way. I would suggest instead of pegs for head ropes, horses should be secured to long lengths of stout rope picketed into the ground at intervals, as a safer method of picketing horses in the field than by the head and heelrope system.' With regard to this I shall have more to say later on.

¹ Two squadrons of this regiment were employed on the defensive outpost line.

On April 24 at the action of Mutta two squadrons of 19th Lancers and one of 21st Cavalry formed a composite regiment under Colonel Biddulph, 19th Lancers, and were employed in screening the advance and protecting the flanks. They subsequently covered the retirement with dismounted fire. The Cavalry casualties were one man killed and one horse wounded of 19th Lancers. The ground here did not favour mounted action, and the enemy would not venture into the plain. At Shabkadr on the same day one and a quarter squadrons 21st Cavalry were employed on advanced guard and drove advanced groups of the enemy out of their first position, which was then occupied by the Infantry. The ground was much more open and suitable for Cavalry here, but the enemy would not venture into the plain. The Cavalry protected the flanks and covered the retirement on this occasion also.

It was here that the 18th Bengal Lancers made their charge in 1897, the memory of which has probably made these tribesmen cautious.

On the formation of the Mohmund Field Force the 21st Cavalry were distributed thus : Two squadrons and headquarters with 1st Brigade (General Anderson, C.B.), one and a half squadrons with 2nd Brigade (General Barrett, C.B.), and half a squadron with 3rd Brigade (General Ramsay, C.B.) in reserve.

From May 14 the Cavalry of the 1st and 2nd Brigades were employed as protective Cavalry, and on reconnaissance, in the destruction of fortified villages, covering grazing of transport animals, and as day outposts.

In reconnaissances in hilly country we had often to adopt the system of Infantry pickets in mountain warfare—*i.e.* occupying commanding positions with small groups, which remained out until the reconnoitring parties returned. The advanced guard Cavalry of 1st Brigade occupied Nahaki in Mohmund country without opposition on May 14, leaving pickets on the Nahaki Pass until the arrival of the Infantry, a reconnaissance of fifty sabres towards the Khapak Pass having found it occupied by the

enemy. The inhabitants had evacuated Nahaki hurriedly, leaving quantities of grain and fodder in the village, the barley crop had only been partially cut, and the valley was covered with standing crops.

The ground at first sight seemed open and excellent for Cavalry, but was really intersected by deep nullahs with precipitous sides, rendering the most careful ground-scouting necessary. Owing to the standing crops it was often impossible to see these nullahs until one came close up to them. Between 9 and 10 every night heavy firing commenced into our camps, and, although some horses and mules were hit, animals soon got so accustomed to it that they did not attempt to get loose; this firing usually lasted till about 3 or 4 A.M., when the enemy drew off altogether. From May 15 to May 19 operations were confined to the demolition of villages and towers in the Bohai Dag; the 2nd Brigade, having crossed the Nahaki Pass, co-operating with 1st Brigade.

On May 20 a forward move took place, and the action of Umar Kili was fought. We were on advanced guard at first, and having located the enemy protected the flanks while the Infantry carried the two villages of Umar Kili, one troop being with baggage escort. No chance of shock action occurred here, a deep precipitous nullah running in our immediate front and left flank, while on the right were hills. I was on the left flank with three troops. The enemy tried to decoy us into a nullah, which we fortunately were aware of just in time. This was hidden from view by high standing crops. We were obliged to content ourselves by holding a small collection of huts which hardly gave sufficient cover for our horses.

As the enemy were trying to work round up the nullah on our left, and the baggage column would have been exposed if they had succeeded, it was necessary to hold on to our position. It was here that Lieut. Goole was killed, and we also had two men wounded and three horses killed. We accounted for a few of the enemy at close range as they crept up the nullah, but I

saw no man hit by long-range fire on this or any other occasion, though of course some may have been accounted for. As soon as the baggage was all in we retired on Umar Kili. No casualties occurred during the actual retirement, but a trumpeter was shot in the head as we arrived in bivouac and died two days later.

A noticeable point on this occasion was that the enemy's fire slackened at once on our mounting and moving off, which we did rather to a flank so as not to mask fire from Umar Kili. They probably thought we had found a way by a detour somewhere across the nullah and were starting to cut them off. This, however, was not the case, a succession of nullahs effectually prevented any such movement, especially as it was late in the evening. It shows how undisciplined men, ignorant of what horses can or cannot accomplish, can be bluffed, and was useful as a lesson.

The only opportunity of shock action we got occurred a few days later at the action of Kargha. The majority of the Cavalry were employed on baggage escort, the route followed this day being the bed of the nullah. Fortunately, the baggage was well up, on a broad front, or there would have been difficulty in collecting a squadron at short notice. The squadron under Lieut.-Colonel Fane broke into three groups and dispersed the tribesmen, sabring about twenty. Our casualties were two men wounded and two officers' horses, Lieut. Smart's and Lieut. Dane's, the former severely. The tribesmen retreated to the hills, where they came under fire from the guns and Infantry; the ground was broken and rough, but notwithstanding this the pursuit was kept up for some distance, until the enemy were completely dispersed.

Some useful lessons were learnt during these operations, and certain old ones rubbed in by practical experience. Some of these were: the great importance of *judging distance*, of *fire discipline*, and of *concealment*. During the retirement of the

Brigade after the demolition of Kuda Khel, the ground on the flank on which we were acting favoured concealment, and I think it possible that if a couple of troops or so had managed to keep completely hidden, without as much as a head showing, and a great show of retirement made with the remainder, parties of enemy might have been induced to venture within charging distance. As it was they did not come far enough into the plains, although we tried to entice them by the above tactics. Tribesmen's sight is wonderfully keen, and the slightest movement is detected by them at once. A high standard of discipline is required to keep men from popping up their heads to see what is going on, but it is a very necessary one I think.

Equipment.—The regiment was armed with the old pattern long magazine rifle secured by the Patterson equipment, which, being much worn, caused rifles to constantly fall. The sword used was a curved one, and in the affair at Kargha cuts were used more frequently than points. The cut comes more naturally to the Indian Cavalry soldier, but my own idea is that a longer and straighter sword would be more efficacious in dealing with men lying down behind stones and bushes than the curved blade now in use, which has such a short reach.

Picketing of Horses.—This subject has been exhaustively dealt with by Brigadier-General H. B. Fanshawe in the CAVALRY JOURNAL for July 1908. It seems that in very soft ground no tackle will hold a horse which really means getting away, but perhaps the following method is worth mentioning. It is employed by the 'Nats,' or wandering Indian acrobats and contortionists, and merely consists of a large knot at the end of a rope, which is buried about a foot deep in the ground. No amount of pulling at *an angle* will move this, and to remove it the earth must be loosened and the rope pulled *perpendicularly*. I have seen these men do all their antics on the trapeze, and do tight and slack rope walking, with no other fastening to the ropes which support their uprights than that mentioned above. As an improvement on this a round wooden disc, with a hole in its

centre, through which the rope is passed and knotted is suggested; the disc to be slightly concave on the upper side so as to get a grip of the soil.¹ After burying it the earth should be well stamped down all round. For hard or rocky ground of course this tackle would be quite unsuitable, and the iron peg the best. It has not the advantage of General Fanshawe's iron peg with nailhead, which falls off if the horse gets loose, but, being of wood, is less likely to damage the horse than an undetachable iron peg.

The best preventive of stampedes would seem to be, to do the utmost to accustom horses to noises. In England the average troop horse is probably as little disturbed by sights and sounds as the London 'bus horse, but among Indian country-breds and Australians there are always a certain amount of nervous horses. That it is largely a matter of habit is, I think, proved by the fact that after a few nights of heavy firing our horses stood quite quietly, and this was not always due to their being tired or on short rations, grain and fodder being plentiful. We have lately, in addition to the usual blank cartridge firing, been training remounts to stand while empty oil-cans are rattled near them, at first gently and then violently, and find it efficacious. The ordinary Indian tom-tom is also used.

Watering, &c.—In some places water was rather scarce, 'tanks' (banked up ponds) being the only source available. In bivouac our portable canvas troughs were filled from these, but in the field these could not accompany us. These tanks got so muddy after a few animals had watered that sometimes the remainder refused to drink. Moreover, the amount of sand and mud stirred up in the water is apt to give sand-colic. A light folding bucket of canvas, carried by two or three men per section, is useful on these occasions.

The 'chagul,' a small light canvas bag to hold water, which

¹ The late Lieut.-General Sir Henry Wilkinson always used, on service, concave metal discs buried in the ground, with light steel chains which he pad-locked round his horses' necks, to prevent the possibility of their being stolen.—EDITOR.

was slung under the horse's belly, was found invaluable, as the men could not carry enough in their water-bottles.

Flies and glare were trying, and our horses wore eye-fringes of twisted string dyed blue (any dark colour would be equally good) throughout the operations. This custom has since been adopted for mounted work in the hot weather in cantonments.

Casualties.—Some method of carrying away wounded men is urgently needed in savage warfare. The 'Hathaway' equipment has, I believe, been adopted by the Russian Government. We had only the ordinary field-stretchers, which cannot keep up.

For assistance in making these notes I am indebted, in addition to some officers of my own regiment, to those officers who were attached to us during the operations.

IMPORTANT

The Staff of the Journal is very limited, and it is therefore necessary for all officers who obtain the Journal direct from the Managing Editor to report any alteration of rank or address immediately, as it is quite impossible to follow up the stations of individual officers: every effort will, however, be made to trace the moves of regiments.

*A SYSTEM OF TEACHING SKETCHING IN
A CAVALRY REGIMENT*

By LIEUT. F. G. A. ARKWRIGHT, 11th (*Prince Albert's Own*)
Hussars

THE object of this article is to suggest a system by which some better results can be obtained in regimental classes than at present.

It is undoubtedly a difficult task to teach a private soldier to sketch, and with the time and materials given it is better to confine one's efforts to freehand or landscape drawing.

Colonel Heard, in his excellent pamphlet on freehand drawing, says :—

‘ Almost anyone, unless his fingers are all thumbs, could with practice produce a picture of an area of country which would be useful from a military point of view.’

To go one step further, I think that anyone of average intellect will more quickly learn to make a good freehand sketch than a good map.

The present system, if system it may be called, seems to consist in the selection of an officer in each squadron (usually the junior subaltern), who is put in charge of a class of about eight men. These men are struck off no duties, provided with no materials except pencils and paper, while the instructor himself often knows so little about his subject that his chief aim is to ‘ kill time.’

Needless to say, the results of any such system are not promising.

Many officers who are interested in the subject have views of their own, but others, who are put in charge of sketching

classes, have no ideas upon which to work. It is for the latter that I have suggested below one system by which better results might be obtained.

I have divided the subject into four headings :—

- (1) The selection of the officer.
- (2) The selection of the men.
- (3) Table showing lectures and work to be done.
- (4) A simple style, easily learnt.

THE SELECTION OF AN OFFICER

As it is seldom that there are three officers in one regiment qualified to be sketching instructors, I think that one officer should be selected as instructor to the whole regiment. Needless to say, he should be a good sketcher himself, a good lecturer, and able to keep men interested in their work ; if he should be a captain or senior subaltern, so much the better.

At present the post of sketching instructor is not greatly sought after, as it entails a considerable amount of extra and irksome work.

I suggest, therefore, that in order to make the post more popular, the officer should be excused some duty of ordinary routine, such as orderly officer, during the month that he is in charge of the sketching classes.

THE SELECTION OF THE MEN

A squadron class should be formed of one N.C.O. and from six to eight men. Eight men might attend for the first lesson, and the instructor could eliminate two or three who show less promise than the others.

If eight men will volunteer for the work, they will be found to be keen and comparatively easy to teach ; if volunteers are not forthcoming, clean and keen men must be detailed. It is most important that they should be clean, as neatness is of first importance in all sketching.

Each class should have two lessons per week for a month ; if more time can be spared so much the better, but this should be the minimum.

In order to increase the men's interest in their work, I would suggest that the following steps should be taken :—

(1) A small prize be given for the best sketch in each squadron.

(2) A small prize be given for the best sketch in the regiment.

(3) The men be struck off all guards, piquets, &c., during their month of instruction.

TABLE SHOWING LECTURES AND WORK TO BE DONE

We have decided that the minimum for each class shall be eight lessons. The following table suggests roughly the work to be done in the time.

1st lesson. Half an hour.—Lecture on general principles of freehand sketching, and the outline of the programme to be followed by the class.

One hour.—Copying simple sketch.

2nd lesson. One hour.—Lecture on principles of the selected style of sketching, laying stress on the two all-important maxims laid down below.

One hour.—Complete copying sketch.

3rd lesson. Half an hour.—Lecture on drawing details.

One hour.—Drawing details from nature, or copying details from a sketch.

4th lesson. Half an hour.—Lecture on starting work, selection of position, &c.

One and a half hours.—Sketching with the instructor, that is to say, line by line with the instructor.

5th lesson. Half an hour.—Lecture if necessary on work done in previous lesson.

One hour.—Finish sketch and show up.

6th lesson. One and a half hours.—The more advanced men sketch from nature alone ; the remainder with instructor.

7th lesson.—Sketch of position with assistance.

8th lesson.—Sketch of position without assistance.

The prize should be given to the man showing up the best sketch in the last lesson. All these sketches should be done from the same spot, and in not more than two hours.

A SIMPLE STYLE EASILY LEARNT

There are several different styles used by military freehand sketchers, and no superiority or originality is claimed for the following. It is a neat, clear, and easily learnt style, in which anything artistic is avoided as unnecessary.

It has always seemed to be unnecessary to lay down any rules of perspective, if the beginner will bear in mind these two all-important maxims :—

1. Never put anything on the sketch without having measured it.

2. Keep the finest lines for the distant background, and gradually thicken the strokes up to the immediate foreground.

With regard to 1 :—on this depends the accuracy of the whole foundation of the sketch, and hence it is most important.

It is surprising how inaccurate the untrained eye is in comparing heights and distances. Beginners, then, should keep this rule to the letter, until they have had some practice, and measure every single thing before they put it on paper.

Captain Lewis, R.F.A., gives a method for measuring any height or distance in his excellent pamphlet ‘Panorama Drawing.’

‘Hold the paper in front of the eye at such a distance that it just covers the extent of country to be drawn ; this distance will be referred to as “the distance.”

‘In order to get a correct outline of the panorama, the positions of important objects must be fixed by measurements, taken with a ruler, held at “the distance” from the eye. The

accuracy of the panorama will depend to a great extent on this distance being correctly preserved, and the simplest method for so doing is as follows :—

‘Take a ruler with clearly marked divisions about an eighth of an inch apart. Fasten a piece of string to the centre of the ruler, and make a knot in the string at the required “distance” from the ruler. By holding this knot between the teeth, the ruler is kept at the correct distance from the eye. It is important to see that the ruler is approximately at right angles to the string when taking a measurement; any measurement taken in this way can be transferred direct to the paper.’

Having fixed a series of points all over the sketch, we can now connect them up, remembering maxim 2, and the whole foundation of the sketch is finished (see fig. 7).

It now remains to put in details such as buildings, trees, &c., to scale, and in order to do this, the beginner must again measure everything.

Buildings.—The outlines should be plainly drawn. Landmarks or buildings of special military importance must be faithfully reproduced, others need not be. It is important to draw accurately the height of all buildings, and it will give more freedom to the sketch if the strokes are not joined at the angles. Never draw bricks or slates (see fig. 1).

Lines of communication are shown by drawing the outline only. Cuttings and embankments may be shaded with hachures, as in conventional signs. Railways have lines drawn across them to represent sleepers. Telegraph lines are shown by drawing the poles only (see fig. 2).

Trees are the hardest details to draw—put in the rough outline only—never attempt to draw branches or leaves (see fig. 3).

Woods are best shown by drawing a dotted line to represent the boundary of the wood. On the near edge or edges of this line draw a row of trees, and only the tops of those behind (see fig. 4).

PLATE I

Fig. 1



Foreground.

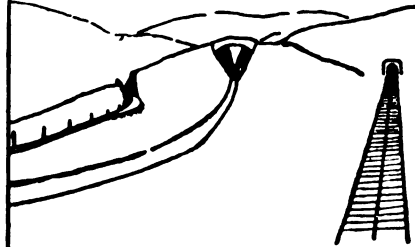


Middle Distance.



Background.

Fig. 2



Lines of Communication.

Fig. 3



Foreground



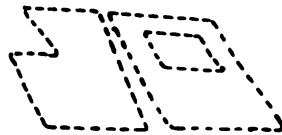
Middle Distance.



Background.

Single Trees.

Fig. 4



Woods.

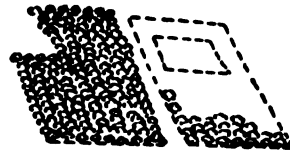
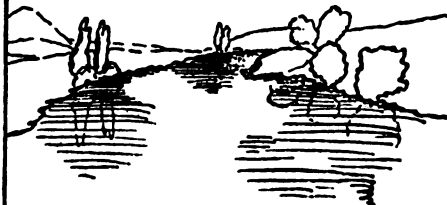


Fig. 5



Cultivation

Fig. 6



River.

Fig. 7.

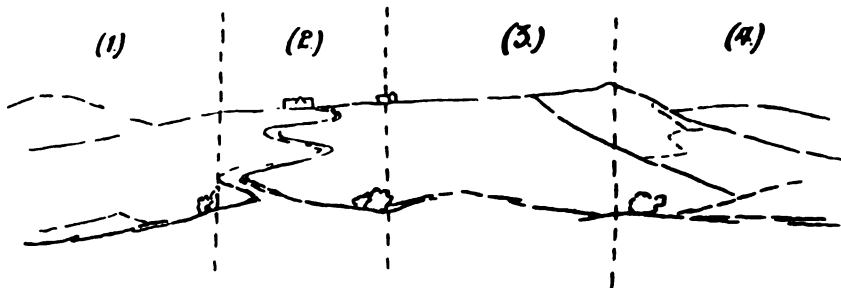


Fig. 8.

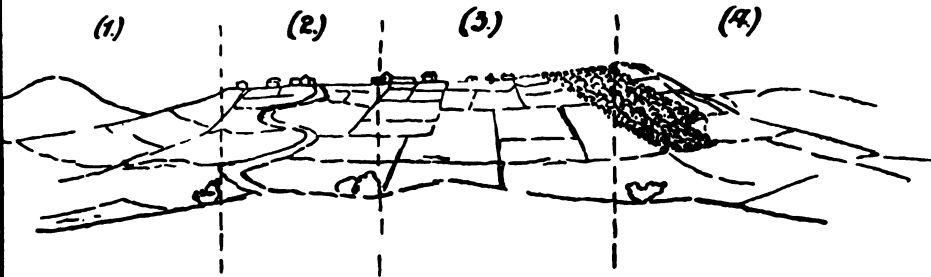
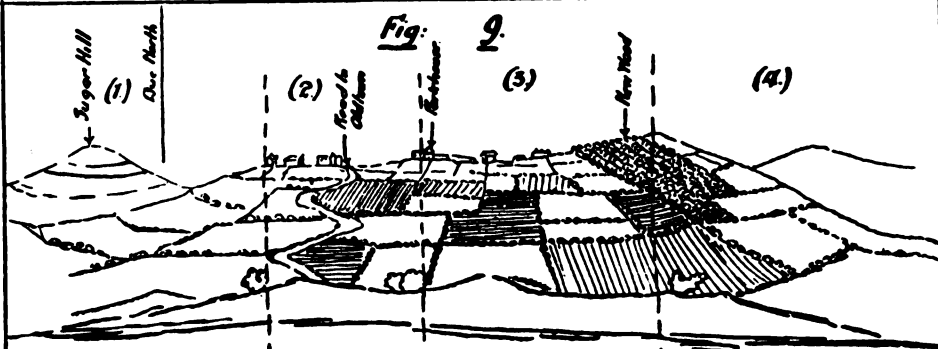


Fig. 9.



*Sketch drawn from Cross-roads, $\frac{1}{2}$ Mile S of X,
looking N by E.*

Fences.—Draw a dotted line along the bottom of the fence, and on it draw, very roughly, the trees or bushes of the fence (fig. 5).

Water.—First draw the banks or shores, then the reflection in the water of objects on the banks, and, lastly, a series of horizontal lines over these reflections, becoming finer and closer together as they recede (fig. 6).

Now we have all the more important details shown (see fig. 8), and we can finish off with minor details, to show the local relief of the ground, and with any written information that would be useful (fig. 9).

A few hints for this style of drawing may be useful to beginners :—

1. Use smooth, unruled paper.
2. Keep all pencils sharp.
3. Use H. pencils for the far-distance, H.B. for everything else.
4. Never attempt to put in shading of any sort.
5. Never attempt to draw clouds, smoke, cattle, grass.
6. Never use colours, except a *very* light shade of blue for water.
7. Rivers should have an arrow drawn along them to show the direction in which they flow.
8. Unless it is of special military importance, omit all foreground nearer than 200 yards.
9. Lines drawn from the sketcher to the limits of the sketch should in no case exceed 80 degrees. Sixty degrees is convenient.
10. Put in a heading, the direction of points of the compass, the name of the sketcher, the date when finished, the point from which the sketch was drawn, names of villages, rivers, &c., and any other useful information.

RECENT PUBLICATIONS

‘The Military Memoirs of Lieut.-General Sir Joseph Thackwell.’ Arranged from Diaries and Correspondence. By Colonel H. C. Wylly, C.B. (John Murray.)

It is with great pleasure that we call the attention of the readers of the *CAVALRY JOURNAL* to this important book, whose interest to Cavalry officers is unsurpassed by any military work which has lately appeared. Unlike another volume on the same subject, and equally of great interest, Colonel Wylly's book is so arranged as to give the minimum of trouble and research with the maximum of information to the reader. Excellent maps of the important battles in which the hero played a leading rôle help the narrative, and a spirited illustration of the 15th Hussars charging the Old Guard at Waterloo will not fail to please those who delight in war. The shortest account of the period through which these memoirs lead us will show the importance of the story to all who take any interest in the glorious history of the British Cavalry, and, by recalling the days when it lived exclusively for practical business, will no doubt be of use to all those who are now striving to return to the traditions of Wellington's army. Although the biography is founded on letters and diaries, yet the writer has quoted judiciously, and has skilfully linked together the extracts by his own narrative, whose charming style and lucid arrangement commend themselves even to an indolent reader, as well as to the strenuous few who can fix their attention on books after a field-day in the morning, a polo match in the afternoon, with other distractions to follow before going to bed.

Sir Joseph Thackwell joined the 15th Hussars in April 1800, after serving in the Worcestershire Yeomanry. He was present with his regiment in Sir John Moore's famous campaign, and fought at Sahaguen, the first encounter between our troops and the renowned legions of the Grand Army. Its victorious issue was received with a thrill of thankfulness and triumph in England at a time when many a more important action passed unnoticed. The 15th returned to Spain in time to take part in the Vittoria campaign, and was hotly engaged in this the most important battle won by a British army without allies. The pursuit of the French through the rugged passes of the Pyrenees, and the sanguinary campaign against the army rallied by Soult for the defence of France, are briefly related. The reader will doubtless share our regret that these stirring events are not more fully dealt with. Of exceptional interest are they at the present day, when the nation has been persuaded to distrust its own right arm, and to scoff at the idea of a British army invading foreign territory. The notion of our troops marching victoriously on Paris doubtless seemed a good joke when the Peninsular War was begun, yet it is tolerably certain now that, had they not done



Photograph by De la Haye, Gloucester.

By kind permission of Mr. John Murray.

CAPTAIN THACKWELL LEADING THE LAST CHARGE OF THE 15th HUSSARS AT WATERLOO.



1.

Indian Cavalry.



2.

so, the opposite would have occurred, and the Grand Army would have tramped through the London streets in all the arrogance of conquerors.

The Waterloo campaign is next described, and the leading part played by the Cavalry of Wellington's army is repeatedly illustrated. After covering the retirement of the army from Quatre Bras to Mont St. Jean, the 8000 Cavalry, of whom about 5000 were British horsemen, formed the second line in the battle of June 18, besides successfully maintaining uninterrupted communication with the detached corps on our right, and with the Prussian army moving to join us on the left. As the story of Waterloo is generally told, it reads as if the French attacks were repulsed by Infantry fire, and that the Cavalry did little more than join in the general advance when those attacks had failed. From the record of the share taken by the 15th Hussars in the day's work it is apparent that the Cavalry brigades were fighting hard all the afternoon. They several times charged the discomfited French Infantry, and the counter-attacks they delivered against the French Cavalry after it had surged past the Infantry squares, drove the masses of Cuirassiers and Dragoons before them out of the position, and materially helped to defeat the manœuvre by which both Ney, and Napoleon himself, expected to overwhelm us without having to commit the Old Guard to the struggle. Thackwell had his arm smashed by a musket ball at the end of the day, and lay on the field all night. Although his arm was amputated next day he rapidly recovered, and even shaved himself three days later.

Space prevents us from following the career of the gallant cavalier in detail, and we pass to the period when Sir Joseph Thackwell, who had meanwhile exchanged to the 3rd Light Dragoons as Colonel, was given the command of the Cavalry Division in November 1838 of the army detailed for the invasion of Afghanistan. Then followed a series of campaigns in which the battles of Maharajpore, Chillianwallah, Sobraon, and Goojerat were decisive, and in each of which the Cavalry Division was hotly engaged. It included the 3rd Hussars, 9th Lancers, 11th Hussars, 14th Hussars, and 16th Lancers at different times, besides several gallant regiments of Indian Cavalry. In Afghanistan the Cavalry was hampered by lack of forage and rocky hills, but in the several actions fought on the plains of India it bore a generous share of the burden of the day. Better mounted, better equipped, and better manned than the foe, it converted each victory into a rout, besides protecting the movements of the Infantry off the field with methodical care. Perhaps the very completeness of the success reaped by the Cavalry in these actions, the last fought on an important scale before the Crimean War, engendered a false confidence and indirectly caused the decline of its military value, which had to be deplored later on. No doubt, too, the bad habits contracted in the Home garrisons—luxurious living and slender exertion—all tended to the same unfortunate result. The moral is that no armed force can be so good but that it rapidly deteriorates in value if its soldierly spirit is not maintained with the utmost jealousy and care against the numerous decadent influences of peace.

The veteran soldier's last employment was as Inspector-General of Cavalry at home during the first six months of the Crimean War, in which post Lord Cardigan, of Balaclava fame, succeeded him in February 1855; he then retired to a property which he had bought in Ireland. The rewards bestowed on him by the Government of the day were not magnificent considering his fifty-five years of splendid

service, even when we allow for the fact that rewards were not distributed quite so lavishly to military heroes then as now. In 1859 heart failure brought a noble life to its close. This biography claims for him perhaps the highest praise which can be given to an officer, in that he made loyalty to the public service his principal objective, and that he loved his comrades as himself. The author is right when he says that this duty is especially hard for a soldier, for it implies reciprocal confidence throughout the corps of officers: it cannot exist where jealousy and self-seeking are rampant. Yet the effective action of an army in the field in a very large measure depends on a spirit of comradeship and absence of personal rivalry and friction.

CECIL BATTINE.

'The Life of Colonel Fred Burnaby.' By Thomas Wright. (Everett & Co.)

It is not only to Cavalry officers that this work will appeal. Since Charles Kingsley wrote the story of Hereward the Wake, 'The Last of the Englishmen,' no such tale of thrilling adventure, personal prowess, and knightly deeds has fired the imagination of modern England.

The son of a fox-hunting parson of the old school, Burnaby's youth was spent in a healthy atmosphere of sport; and his education was that of the young English gentleman of the day—a few years of Harrow, a private tutor, and a year in Dresden, where his gift for languages enabled him to master German, French, and Italian, before joining the Blues in 1859.

The time was one of profound peace, and the young officer spent it in preparing himself both mentally and physically for war—his marvellous physique, 6 feet 4 inches in height, and 46 inches round the chest, enabled him to perform feats of strength which no man of his day could equal, and as a fencer and amateur boxer he was unrivalled.

In 1864 he first turned his mind to aeronautics, and became a confirmed and active balloonist. In 1868 he was associated with his friend—Mr Thomas Gibson Bowles—in that sin of the latter's youth, the establishment of *Vanity Fair*, and visited Spain in search of adventure and copy. In the following year he journeyed through Russia and Italy, writing charming letters as he went, many of which were published in the *Morning Post*, and in 1874 joined Don Carlos' Headquarters in Spain as Military Correspondent of the *Times*.

The winter of 1874 and 1875 saw him journey from Suakim via Berber and up the Nile beyond Fashoda, where he met and admired General Gordon, and in November 1875 he started on the famous 'Ride to Khiva,' which made him the hero of the hour. This was followed by a journey 'On Horseback through Asia Minor' in 1877, and during the Russo-Turkish War of 1878 he joined his friend Valentine Baker and saw as much of the fighting as he could.

On his return to England, Burnaby went into politics, and having with characteristic daring conceived the idea of attacking the Liberals in their stronghold, Birmingham, he entered the contest with all the dash and energy of his character, and, though defeated, became at once a prominent feature in the political world.

From 1882 to 1884 politics and ballooning claimed him for their own: he succeeded where others failed, being the first to cross the Channel in a balloon, and he was instrumental in founding the Primrose League.

In 1884 he fought with Valentine Baker at El Teb on February 4, and again at the second battle with General Graham on February 28, where he was wounded in the arm by a spear thrust, and on his return delivered that series of passionate speeches on the abandonment by the Gladstone Government of the Soudan and Gordon, which helped to force it once more to action. Resolved if possible to be one of Gordon's rescuers, Burnaby, in defiance of the War Office, joined Lord Wolseley at Wady Halfa in December 1884, and on January 7, 1885, the bravest man in England, gentleman and soldier, met his death outside the stricken square at Abu Klea.

'The heroic example of other days is in great part the source of the courage of each generation, and men walk up composedly to the most perilous enterprises beckoned on by the shades of the brave that were.'

'Statistical and General Report of the Army Veterinary Service for 1907.' Issued by the War Office.

We would call attention to this valuable and comprehensive work, which every Cavalry officer should study with care.

The amount of incapacity due to causes largely preventable by careful stable management is lamentable.

As the Director-General A.V.S. points out, colic, which has increased, is largely the result of errors in feeding, diseases of the feet can be minimised by careful stable sanitation and shoeing, while kicks and contusions, for which 544 horses are under treatment daily in the Army, would be largely prevented by the provision of kicking-mats hung from the stable bales.

The provision of these kicking-mats is a question for higher authority—i.e. whether their cost is greater or less than the annual loss of £3,600 caused by broken legs—but with such an excellent guide as the official publication on 'Animal Management' at our disposal, there is no reason why incapacity from all causes dependent on stable management should not be reduced to a minimum.

The 'Report on Veterinary Services in South Africa,' by Colonel Blenkinsop, D.S.O., F.R.C.V.S., which is included in the General Report, is most instructive reading.

'The Complete Foxhunter.' By Colonel Charles Richardson, Hunting Editor of the *Field*. (Methuen.) 12s. 6d. net.

That the author is eminently qualified to write about the sport of which the book treats goes without saying, and the work is full of sound practical information and advice, useful both to the Master and the field.

After a brief historical sketch, the changes in the modern conditions of hunting due to excessive game preservation, barbed wire, &c., are dealt with; the Master's duty to his field, arrangement of the draw, and so forth, are touched on, and under the heading of 'The Field' hunting etiquette, dress, equipment and horses, as well as the important subject of subscriptions, are exhaustively discussed.

The comparative advantages of the various hunting centres are set forth, and foxhounds, their origin, breeding, types, and value, are written of at length.

Clearly and pleasantly written, full of pointed anecdote, and admirably illustrated, the 'Complete Foxhunter' should find a place in every Mess library.

'St. George for Merrie England.' By Margaret H. Bulley. (George Allen & Sons, Charing Cross Road.) 5s. net.

The figure of St. George, the Patron Saint of English Chivalry, has always appeared upon the cover of the CAVALRY JOURNAL, and it is with special interest that soldiers will read this, the latest work upon his story.

The authoress has been at pains to sift an immense mass of books and papers, and to put before us a digest of legends that surround the warrior Saint, honoured both by Christian and Moslem, whose cult was first brought to England by Richard I. in the twelfth century, and whose red cross is emblazoned on our Flag.

The book contains some fifty admirable full-page illustrations.

'Notes on Field Artillery for Officers of all Arms.' By Captain Oliver L. Spaulding, 5th Field Artillery, United States Army. (Published by U.S. Cav. Association.)

This book is an expansion and re-arrangement of a course of lectures delivered by the author in the United States Infantry and Cavalry schools.

The first chapter explains the characteristics of Field Artillery, and describes its development from the earliest times up to the present day.

The second chapter compares the classification and organisation of Field Artillery at present in use in the armies of the first-class Powers.

The succeeding chapters deal with material, and give a brief outline of fire discipline and fire tactics as practised in the United States Army. These latter only vary in small details from our own 'Field Artillery Training,' though the terms are different in many cases.

At the end of the book are two maps, and some examples of 'Manœuvre and Firing Problems.'

The technical part of the book is very clearly worded, and officers of all arms should find it both interesting and instructive.

'Horses, Horsemen, and Stable Management.' By Godfrey Bosville. (Routledge & Sons.)

A collection of brightly written articles reprinted from Baily's and the Badminton Magazines. They contain allusions to the writings of Xenophon and Aristotle, an account of the veterinary profession and its training, and remarks on a variety of subjects; the riding of Archer, Cannon, Tod Sloan and others; bits, saddles, whips and spurs; breeding, vices, stable management, &c., which, though neither deep nor of great practical value, are readable and suggestive.

The illustrations of horses are very good.

'The Military Law Examiner.' By Lieut.-Colonel Sisson C. Pratt, late R.A. (Gale & Polden.) 4s. 6d.

Generations of British officers owe to Colonel Pratt a debt of gratitude for his help in reading the subject of Military Law for examination. The present volume (7th edition) brings the subject up to date and includes the changes consequent upon the Territorial and Reserve Forces Act of 1907.

'Administration, Organisation, and Equipment made Easy.' By Lieut.-Colonel Banning. (Gale & Polden.) 4s. 6d.

Lieut.-Col. Banning's admirable book is in this, its eighth edition, revised and brought up to date in accordance with the latest regulations and text-books. We

venture to think that the question of Lines of Communication and Supply of all kinds would be made clearer by a few simple diagrams.

'Military Law made Easy.' By Lieut.-Colonel Banning. (Gale & Polden.) 4s. 6d.

Another of Lieut.-Colonel Banning's books is in this, its fourth edition, brought into line with the latest authorities.

'How to become a Drill Instructor,' by Sergeant-Major Ferguson, the Seaforth Highlanders. (Gale & Polden.) 1s. 6d., gives many hints useful to N.C.O.s, especially upon the assimilation of text-books and the preparation of lectures thereon.

'Guide to Promotion' for Officers in Subject (A) (Regimental Duties). By Captain R.F. Legge. (Gale & Polden.) 4s.

For officers who require cramming in what is their daily work, Captain Legge's little book will be found useful.

'The Union Jack Club Calendar, 1909,' 91a Waterloo Road, price 6d., gives a great deal of useful information to soldiers visiting London, including a map of the Underground Railways and Tubes.

✓ 'Military History for Examinations in 1908-09.' Grant's Operations in Virginia, May 3 to June 30, 1864.' By Lieut.-Colonel Brunner. (Forster, Groom & Co., 15 Charing Cross.) 1s.

Officers who contemplate presenting themselves for examination in this subject will find a shilling well spent in the purchase of this pamphlet, which contains an admirable summary, a clear map, and a number of questions.

'How to Instruct in Aiming and Firing.' By Q.M.S. Instructor T. Bostock, of the Hythe Staff. (Gale & Polden.) 6d.

A most practical and useful little book in its third edition.

'Lessons from 100 Notes made in Peace and War,' By Major-General E.A.H. Alderson. (Gale & Polden.) 2s.

In a varied and active life General Alderson has jotted down many notes, which he gives with his comments and reflections thereon.

'The Scout in War, What he does, and How to do it.' By One of Remington's Tigers. (Sealy, Bryers, & Walker, Dublin.)

A product of the South African War. The author is evidently an amateur, whose military service in South Africa and association with genuine frontiersmen of the bush, the veldt, and the prairie have given him valuable experience; and many useful hints on veldt life are given for the benefit of others who may find themselves similarly situated.

There is a good deal of what Americans call 'hot air,' and too much of the usual self-complacent criticism of Regular troops and Regular officers, but the volume is pleasant and instructive to read.

✓ 'Der Kavalleriedienst im Frieden.' By Lieut.-General von Pelet-Narbonne. (Berlin: Mittler & Sohn, 1909.)

Lieut.-General von Pelet-Narbonne's comprehensive work has already arrived at a sixth edition, and appears to be always kept up to date. It seems to

contain in this first volume—the second being entitled ‘Kavalleriedienst im Kriege’—practically everything that can be of use either to the young Cavalry officer or to the more matured Cavalry leader who is charged with the instruction and training during peace of man and horse for the work which will be required of either during war. Under the different headings will be found not only the mere material teachings of the management of horse and weapons, of drill and manœuvre, but great stress is laid upon the cultivation in the recruit of the *military spirit* to which so much importance is wisely attached by those responsible for the upbringing of the modern Continental soldier. Discipline, instruction—systematic and progressive—in the whole duty of the soldier, hygiene, guards and picquets, and patrol leading form the burden of the first part of the book, while Part II. deals with the horse, his anatomy, shoeing, horsemanship, feeding, and the treatment of all the ills to which horseflesh is heir. In the third part the writer treats of the use of arms, mounted and dismounted, and in the fourth we have full instruction in the details of duties in the field, reconnaissance, despatch-riding, the leading of officers’ patrols, and the conduct of the minor enterprises of *der kleine Krieg*. Part V. is called the Cavalry officer’s *Sattelbuch*, is separately bound in handy form in a pocket at the end of the main work, and in it will be found many technical details of the special employment for which Cavalry may at times be required, together with useful notes of the organisation, methods, armament, dress, &c., of foreign armies. A special feature of this exhaustive treatise is the useful bibliography at the end of each section—mainly from German sources—dealing with the particular subject under discussion. The reader is thus invited not to take for granted all that has been told him by the writer, but is encouraged to learn where and how he can expand his knowledge by the opinions of other authorities.

‘Leistungen von Reiter und Pferd.’ By Graf von Häsler and Freiherr von Maltzahn. (Leipzig and Berlin: Grethlein & Co.) Price M.2.80.

In this little book these two well-known Continental experts treat of the value of long-distance rides as a preparation for the work which in war time will be demanded of both men and horses. Baron von Maltzahn recounts in considerable detail the history of such exercises, from the days of Charles XII. of Sweden, who rode from Adrianople to Strabsund in sixteen days, up to the present time, and considers that the long-distance ride carried out by individual and solitary officers has this advantage over all others, in that it is an excellent preparation for the despatch-riding which during a campaign would be entrusted to unescorted or unaccompanied officers; while on such practice rides during peace officers learn far more than they would be likely to do if accompanied by comrades or orderlies and grooms. There is no attempt in this book to palliate, much less to conceal, the sufferings and casualties among horseflesh which resulted from the initial attempts to institute such exercises, and which were no doubt responsible for the distaste which Englishmen evinced for what was at the time a considerable innovation. But on a careful study of the detailed history given us by Maltzahn of the majority of the long-distance rides undertaken by Austrian and German officers, one is forced to the conclusion that men have learnt that to bring in one’s mount fit for further prolonged effort is equally important for military purposes as to bring him to the journey’s end at all. Here will be found full reports of extended

rides performed not only on the Continent of Europe, but in German East Africa and across China by single officers and by bodies of men; with many valuable hints for training and for treatment and diet of man and horse during the journey. The secret seems to lie in accustoming the horse to that to which he is unaccustomed: to the variety of forage he will find *en route*, to the sugar-sweetened water which is strongly recommended, and which few horses will drink off-hand, to the regular pace and to the regular periods for which it must be maintained. At the end are a few pages on the duties of the *Ordonnanzoffizier* in war time, which are followed by several schemes for use during peace. The book should be of great service to German officers, for whom such rides are part of the annual training, while not without interest to us.

‘Gedanken zur Neugestaltung des Kavallerie-Reglements.’ By General von Bernhardt. Berlin: Mittler & Son. 1908. Price M2.50.

The drill-book of the German Cavalry was issued some two and twenty years ago, and its teachings are admittedly out of date. It appeared at a time when the lessons of the war of 1870 had hardly been appreciated at their full value, and many years before the experiences of the Boer War and of the campaign in Manchuria, in regard to the possibilities and limitations of the use of Cavalry in the field, had been given to the world. For some time past modern Continental Cavalrymen have pressed for a revision of the present drill-book; many papers have appeared in foreign journals urging the need for recasting of principles which have become out of date, and for the acceptance of teachings more in accordance with the latest field experience; and the present little book is an urgent appeal for reform by one who is not only the Commander of the 7th Army Corps, but who is himself a Cavalry General and a well-known writer upon all questions concerning his own special arm of the service. The author of this pamphlet fully admits how great an advance the drill-book of 1886 was over that which it displaced, especially in regard to the greatly increased mobility demanded of the Cavalry; but he points out where the regulations fail from the point of view of the modern employment of Cavalry, and offers many suggestions whereby the book might be brought more into line with the accepted ideas of to-day. He discusses at some length the organisation of large Cavalry masses, but it is to be noticed that he does not attempt to make out any case for such an organisation during peace, but merely that such should be readily adaptable on the outbreak of war. General von Bernhardt has naturally much to say about the dismounted action of Cavalry, and holds that fire should only be employed when the desired effect is unobtainable by shock action; he lays great stress upon the danger of regarding fire action merely as defensive, and insists that the mounted arm must employ rifle fire offensively, so that the *Geist der Offensive* may under no circumstances be lost sight of. He suggests that fire may usefully be employed in the pursuit, at long ranges against reserves, and to assist in gaining positions on the extreme flanks of an enemy. Very many other points, including the employment of the most recently adopted technical methods of communication, &c., are thoroughly discussed, and although the book must prove of main interest to those for whom it is primarily intended, its study should benefit all Cavalrymen, even if they do not altogether agree with some of the contentions of the writer.

'Essai Historique sur la Tactique de la Cavalerie.' Par le Lieut.-Colonel Gérôme. 2nd Edition. (Henri Charles Lavanelle, 10 Rue Danton, Paris.)

Every English officer can read a French book (though, alas! not all can read German), and in French are many books wherein the true doctrine of Cavalry is clearly set forth.

French Cavalry writers, and Germans too, base all the theories they put forward upon the actual experience of many wars; they study well their causes before they venture to deduce results; and with them the sudden changes from which the British Cavalry has suffered, changes based solely upon individual opinion and resting on no solid foundation of historical fact, are impossible.

In his historical essay on Cavalry tactics, Lieut.-Colonel Gérôme traces and comments upon the developments of the French Cavalry from the days of Charlemagne till the issue of their Cavalry Regulations of 1899.

The views of Condé and Turenne, the 'dreams' of Marshal Saxe, and the principles of Frederick the Great are all clearly set forth; Napoleon's employment of Cavalry masses is carefully considered, savage warfare in Algeria is touched on, the War of Secession in America is dealt with at length, and finally, after an exhaustive treatise of the Cavalry work of 1870-71, Lieut.-Colonel Gérôme finishes with a consideration and comparison of the French and German Cavalry Regulations up to the present time.

This is a book which should find a place in every Cavalry officer's library.

FOREIGN JOURNALS

Kavalleristische Monatshefte.—In the September number of the Journal Colonel Buxbaum has a short paper on the 'Horsemanship of the Cavalry Commander.' He is of opinion that the stress which is in the present day laid upon the mental qualities of the Cavalry leader has been rather overdone, and that hardly enough importance is attached to the advantage which the finished horsemen possesses at the outset over the more mentally gifted leader, who is not equally at home in the saddle.

While a man may be an excellent horseman, and yet an indifferent Cavalry commander, no man, says Colonel Buxbaum, can possibly be a Cavalry leader of the first class who is not a finished horseman.

To this succeed some remarks on the 'strength and composition of the Cavalry Division,' with regard to the most recent experiences.

Everywhere but in France, the writer contends, the division of three brigades or a total of twenty-four squadrons is considered best, since in action this has the advantage of permitting the retention of one brigade at the disposal of the divisional commander.

The strength of the component parts of the division are in these days, however, so greatly weakened by the endless detachments required, that there is a proposal, favoured by many Cavalrymen, to add a fourth brigade to the division.

There are, however, many obvious disadvantages to this increase, connected with space, supply, &c.

For the accompanying Artillery, the writer contends that twelve guns are ample, but advocates their being contained preferably in three four-gun batteries, while the machine-gun detachment should be divided into as many sections, each of two guns and two wagons, as the division contains brigades.

The writer further opines that divisional Cavalry is not required for each Infantry division, but only for those on the flanks and in the immediate front of the army, and suggests the remaining divisional Cavalry being massed for attachment to the Cavalry divisions for any very special employment.

There is a translation of an account by a Russian officer of the work of Mischenko's Cavalry about Sandepu, and a very eulogistic relation of the recent Cavalry manœuvres in England, which are declared to offer most useful lessons in the leading of Cavalry masses.

The October number opens with a long account of the work of the Cavalry divisions in the last German manœuvres, compiled, mainly from official reports, by an officer on the General Staff; the account treats of the events of each day, and stress is laid on the excellence of the arrangements on either side for the collection and transmission of information.

Wireless telegraphy was but sparingly used between the division and the Army Command, and on two occasions the one side was able to intercept and read off messages intended for the other.

This paper is followed by one on the Austrian Cavalry manœuvres from the point of view of the commander of the accompanying machine-gun detachments; while in '*L'épée aux reins*' Colonel Buxbaum lays the greatest stress upon the importance of the rôle of Cavalry in confirming a victory, for which rôle the author of '*Galopp*' insists upon the systematic training of the horses for long-sustained efforts.

There are two short papers of interest—one descriptive of the Whitman saddle, the other on the use of the pistol when mounted.

In the November number Major-General von Czerlien discusses at length the best position for the retention of Cavalry masses in the field, whether these should be held in the rear of the *Schlachtfront*, or whether they should be kept on the flanks, and offers many weighty reasons in support of the latter contention.

General Gradinger contributes a short but wholly sympathetic sketch of Murat as Cavalry leader, king, and private individual, intended apparently as in some measure a reply to a previous paper by Colonel Buxbaum on Seydlitz, wherein the two Cavalry commanders were compared very much to the disadvantage of Murat; while in an as yet uncompleted article Lieut.-Colonel Wenninger discusses the various conditions under which a body of Cavalry meets another in the actual shock of the charge.

An interesting and useful account of the training given to themselves and their horses is written by two officers who took part in this year's long-distance ride from Buda Pest to Vienna, and this is followed by some statistics of the health of the army horses in three of the German Army Corps during the year 1907.

It appears from these that the percentage of sick horses was extraordinarily high, amounting in the case of the Hanover Riding Establishment to 148.47 per cent. of the horses present; the prevailing disease seems to have been a virulent form of influenza.

Militär-Wochenblatt.—The issue of September 17 contains a few remarks of a congratulatory nature on the Cavalry manœuvres in England.

The writer finds that there has been a reaction in this country against the

ideas which would have made of our Cavalry an expensive form of Mounted Infantry; he congratulates the British Cavalrymen that the *attack* has not merely been re-established, but that increased importance has been attached to it.

If it is to be successful in war the mounted attack must, says the writer, be practised in peace.

He is full of praise for the conduct of the manœuvres and for the evidence on every hand of the presence in our squadrons of the *Kavalleristische Geist*.

Among the several articles now appearing in the German military journals on the crying need for a new Cavalry drill-book, there is one in the *Militär-Wochenblatt* of October 20 and 22, by Colonel von Hertzberg, commanding the 35th Cavalry Brigade. He writes on the necessity for less dense formations in the field, declares that regimental or brigade columns are too noticeable and are too vulnerable, that it is impossible to conceal such masses from view, and that, owing to the dust raised, obstacles can neither be seen nor overcome. He gives several sketches of formations he would propose for consideration, and suggests, as do other German Cavalry leaders, a diminution of the regulation pace when manœuvring in mass. He complains, too, that the present craving for silent drill is apt to be overdone, that its practice is only required for the carrying out of a surprise, and that, since the untimely use of signals and signs is apt to mislead, verbal orders are preferable in the actual presence of the enemy. He is inclined to think that there is too much inclination for dismounted work; squadron, regimental, and brigade commanders are too much given to looking to their units, and do not pay enough attention to the leader; while the offensive is the sole object of Cavalry, he finds that there is an inclination to come into action without sufficient information about the enemy. Finally he remarks upon the latitude allowed to umpires, who rule that a Cavalry attack has failed owing to the losses which that arm would have incurred, and points out that an attack by Cavalry, whether on guns or Infantry, *must* entail loss to the attackers.

In the number of this Journal dated October 29 there is another paper on the need for a new *Exercier Reglement* for Cavalry, but the writer is apparently of a different mind to the last in regard to signals—of which he would introduce several more—and dismounted work, for the increased instruction in which he would do away with much of the present sword and lance exercises.

In the issues of November 3, 5, 7, and 10, there is a long review of the operations of the Russian Cavalry in May and June 1904, and here one seems to notice, as in some French criticisms on Cavalry work in Manchuria, a disposition to find excuses for the comparative failure of the Russian Cavalry in the campaign. The number of November 12 contains an account of the instruction recently afforded in Germany to a limited number of Cavalry officers and non-commissioned officers in the reconnaissance of hostile Artillery positions—an art which presents special difficulties, and in regard to which little or no instruction has apparently been hitherto forthcoming.

Revue de Cavalerie.—In the numbers for August, September, and October, the majority of the articles are continued either from month to month, or are renewed after a lapse of a month or more—a procedure which has its disadvantages. Henri Choppin writes in his 'Souvenirs' in August and September of General de Galliffet, and in the month following of General Vanson, the founder

of the 'Musée de l'Armée.' The articles on 'La Patrouille de Cavalerie,' written in a very pleasant style, are continued through all the numbers, while in 'L'Ecole de Brigade,' continued in September from June, is a selection of manœuvre problems for units of varying strength. The author of 'Au Retour!' pleads for increased simplicity in manœuvre; difficult or involved movements are only suitable, he declares, for the *tactique des petits paquets*; and for the ordered evolutions of the large masses which will nowadays be set in the field, a return to extreme simplicity of manœuvre is essential. In 'L'Abreuvement des Chevaux' in the October number, a veterinary officer insists upon the need for the more frequent watering of horses, and even seems to hold that horses may safely be watered when hot (so long as the work which heated them is continued), while feeding, and when fasting. 'L'Augmentation de l'Artillerie' is a paper rather out of the beaten track in this *Revue*, but it is interesting as putting forward a strong objection to the proposed augmentation of the French field batteries from four to six guns per battery.

Spectateur Militaire.—There are comparatively few papers of Cavalry interest in the numbers of this fortnightly for the last three months.

In 'The Tactical Lessons of the Russo-Japanese War' (September 1) there is an almost appreciative mention of the work of the Russian Cavalry, and it would seem that, with a somewhat belated recognition of the unusual physical difficulties of the country, there has also arisen an inclination to consider whether the Russian leaders did not do almost as well as might have been expected with the inadequately trained *personnel* at their disposal.

'Le Travail en Bridon' (October 15 and November 1), by an officer of the Chasseurs d'Afrique, suggests how, while mounted in the riding school or manège, the recruit may be himself made to understand and explain the reasons for the pressure which he exerts upon his mount by his legs and thighs, by the inclination of his body, or by the use of the reins.

The Journal of the United States Cavalry Association (October) contains an interesting account of the breaking of Australian remounts by the First Cavalry at Manila. After a month in the corrals, these animals were given only three months' training before being put in the ranks. This hardly seems long enough either to acclimatise horses from a different hemisphere, or to develop their muscles for military service, and it would be interesting to know the results.

There is an interesting translation of a paper on 'Balance' by Lieut.-General van Helden, Inspector of Cavalry of Holland, and of a German study of the battle of Elandslaagte by Major Hoppenstedt of the Potsdam Military Academy, which well repays careful reading.

EDITORIAL NOTES**HOME**

THE Cavalry Division will be trained in the neighbourhood of Salisbury Plain this year from about August 28 to September 11.

The Household, 1st, 2nd, and 4th Cavalry Brigades, with the IVth and VIIIth Brigades R.H.A., three Field Troops R.E., and a Wireless Company R.E. will compose the Division, and all Cavalry regiments stationed in Great Britain, except the 8th Hussars, will be included in these Brigades.

The 4th Dragoon Guards from Brighton will also attend.

The Household, 2nd, and 4th Cavalry Brigades, IVth Brigade R.H.A., and two Field Troops R.E. will probably carry out Brigade Training on the Plain for ten days before the Division concentrates on August 28.

The Camps will be at West Down and Perham Down.

The Division will be inspected by the Inspector-General of Forces.

Classes will assemble at the Cavalry School this year as follows :—

1. Cavalry Subalterns, nine months, March 1 to November 27.
2. Cavalry Captains, six weeks, March 1 to April 8 ; May 3 to June 12 ; June 21 to July 3.
3. R.H.A. Subalterns, two months, September 6 to October 30.
4. Cavalry N.C.O.s, seven months, March 29 to October 30.
5. Senior Yeomanry Officers, two weeks, February 1-13 ; February 15-27 ; April 19 to May 1.

It is apparent that the scope of the School has been considerably widened since its permanent location at Netheravon ; the present syllabus of instruction is as follows :—

SYLLABUS OF COURSES OF INSTRUCTION AT THE CAVALRY SCHOOL, NETHERAVON

CAVALRY SUBALTERNS

I.—*Equitation*.—(i) Proficiency, and the power of imparting instruction in riding, and in the breaking and training of horses for military purposes.

(ii) Skill-at-arms.

II.—*Horse Management and Veterinary Subjects*.—(i) Horsemastership in peace and war, in stables and in camp, on board ship and on rail.

(ii) Points, general anatomy, and physiology of the horse, with special regard to the organs of locomotion, respiration, and digestion, and the fitting of saddles and harness.

- (iii) Dentology and care of young horses.
- (iv) Common diseases and ailments—their cause, diagnosis, simple treatment, and means of prevention.
- (v) The art of farriery in all its branches.
- (vi) Judging forage, including the study of the grains and fodders available in foreign countries, as well as poisonous plants most frequently met with.
- (vii) Fitting of saddlery and harness, including the study of their design and manufacture, and their preservation and repair.

III.—*Strategy and Tactics*.—(i) The study of the tactical and strategical employment of Cavalry in the field, including such study of the methods of employment of Cavalry in foreign armies at present and in the past, as will facilitate the deduction of lessons for our guidance.

- (ii) Study of the service of intercommunication.
- (iii) The rapid appreciation of situations such as are likely to confront a Cavalry officer in war, and the writing of (or issue of verbal) orders suitable to the case.
- (iv) Practical exercises in the field, to embrace :—
 - (a) Reconnaissance (strategical and tactical) and scouting.
 - (b) Operations of Cavalry ('strategical' and 'protective'), including the principles of the employment of Royal Horse Artillery and machine guns in co-operation.
 - (c) Operations of Cavalry in co-operation with the other arms.
 - (d) Duties of divisional Cavalry.
 - (e) Despatch-riding.

IV.—*Military Engineering as affecting Cavalry*.—Subjects as for Cavalry officers' and N.C.O.s' pioneer courses at the S.M.E.

V.—*Sanitation*.

CAVALRY CAPTAINS

The course for Cavalry captains will be a refresher course, running briefly through the subjects included in the Cavalry Subalterns' Course.

CAVALRY NON-COMMISSIONED OFFICERS

The subjects for the Cavalry N.C.O.s' classes will be the same as for Cavalry subalterns, but simplified as regards II. and III.

ROYAL HORSE ARTILLERY OFFICERS

The course for Royal Horse Artillery officers will deal chiefly with strategy and tactics, though as much of the other subjects will be included as time permits.

SENIOR YEOMANRY OFFICERS

The course for Senior Imperial Yeomanry officers will comprise as much varied and useful study of strategy, tactics, and administration as time and circumstances may permit.

A good deal has been done during the past year to make the School efficient ; a riding school, 72 yards by 26 yards, is nearly finished, and a capital library has

been provided, to which, it is hoped, Cavalry officers, both past and present, will send any works of military interest they can spare, especially books on equitation and the employment of Cavalry.

Major Dibble is leaving on the completion of his military service, and the equitation establishment will be under Major Fritz Wormald, D.S.O., 8th Hussars.

The excellent principle that officers shall be taught by officers is to be applied throughout, and Lieutenants A. B. Lawson, 11th Hussars, and G. N. Reynolds, 21st Lancers, are now undergoing a ten months' course at the French Cavalry School at Saumur, with a view to qualifying as assistant instructors for duty at Netheravon for two years.

This is not the first time Englishmen have gone abroad to learn horsemanship (*vide* the book on Equitation published in 1667 by 'The Thrice Noble, High, and Puissant Prince, William Cavendish, Duke, Marquess, and Earl of Newcastle,' wherein he says: 'This noble art was first begun and invented in Italy, and all the French and other nations went thither to learn; the seat of horsemanship being at Naples. The first that ever writ of it was Frederick Grison, a Neapolitan; and truly he writ like a horseman, and a great master in the art for those times: Henry the Eighth sent for two Italians that were his Schollars to come to him into England; and of one of them came all our Alexanders; and their Schollars filled the Kingdom with horsemen').

The illustrations facing p. 105 show an extemporised raft made by an Indian Cavalry regiment in the Punjab during squadron training.

The materials used were:—Three waterproof canvas sheets of the size ordinarily carried by the mule transport carts, six stout bamboo poles of various sizes, some $\frac{1}{2}$ -inch rope, several bundles of dried maize (Indian corn) stalks, and a quantity of long and coarse dry grass cut from the grass lands close by.

First a rectangular bale of maize stalks was enveloped in one of the waterproof sheets, taking care to make all the joints on the top side; its dimensions when complete were roughly 5 to 6 feet long, 4 feet wide, and 18 inches deep.

Before going further this bale was given a thorough testing by having it towed across the river, which was at this time about 200 to 250 yards wide—the flood of snow water not having yet entirely subsided. (See Illustration I.)

The bale took in a certain quantity of water, but carried two men high and dry.

A second bale was packed in a similar manner, but of dried grass instead of maize stalks. As was expected, owing to the greater density of the grass, this bale was very much less buoyant than that made of the maize stalks.

Placing the two bales about 18 inches apart, a rough frame-work of four bamboo poles was lashed to them on the top side, with two smaller poles across the centre portion to stiffen the frame. Finally, the third waterproof sheet was stretched and fastened over the frame.

Six men boarded the raft and punted it across the river. (See Illustration II.)

They succeeded in reaching the opposite bank, but the bale made of grass was by that time almost entirely under water, whilst the maize-stalk bale, which had now completed the journey three times, was still holding its head above water.

The method which is adopted by the Chilian, of mounting without stirrups, is to grasp the mane of the horse with the left hand near the poll, the right hand grasping the pommel of the saddle. The man then raises himself by springing from the ground and straightening the arms, and then throws his right leg over the saddle, and so assumes his seat. This is said to be far easier than our method of raising the body over the wider portion of the horse, namely, his barrel.

An ammunition surcingle, to carry ammunition under the horse's belly, on the same principle as the Indian Cavalry water 'chagal,' has been proposed for trial.

The appliance consists of an ordinary surcingle, to which are attached six (or in the case of any small-girthed horse five) pockets for ammunition which fit immediately over the girth. The centre pockets take fifteen rounds each, and the two side pockets ten rounds each. Total carrying capacity of a six-pocket surcingle, eighty rounds. Weight filled, $6\frac{1}{2}$ lb. Carrying capacity of a five-pocket surcingle, sixty-five rounds; weight filled, $5\frac{1}{2}$ lb.

Advantages Claimed.—Weight most advantageously placed and carried.

- (a) The weight through the surcingle is carried on the saddle itself, and is therefore distributed along the horse's back.
- (b) The weight being actually placed beneath the horse tends to lower the centre of gravity of the horse. Placed thus it tends to minimise as far as possible the strain on a horse's legs and tendons, especially when going over bad ground.
- (c) The weight is fixed and not shifting about when the horse is in motion.

It has been decided that riding masters are to be retained in the Household Cavalry.

GERMANY

New Formations.—The following new formations were created on October 1 last :—

- (a) Staff of the new 39th Cavalry Brigade.
- (b) A new Cavalry regiment, the 5th Jäger zu Pferde, on the higher establishment.

The new 39th Cavalry Brigade consists of the 3rd Jäger zu Pferde, and the 14th Dragoons, which have been taken from the 29th Cavalry Brigade. The whole brigade is stationed at Colmar.

The 14th Dragoons have been replaced in the 29th Cavalry Brigade by the new 5th Jäger zu Pferde and are stationed complete at Mulhausen.

New Cavalry Carbine.—The new Cavalry carbine is about the length of our shortened rifle, and with a mechanism exactly similar to the present German rifle ('98 Mauser). It is, however, only sighted to 2000 metres (2200 yards), and a fixed sight is used up to 300 metres (400 metres in the long rifle).

Almost the entire barrel is encased in wood, and a straight hook is attached to the muzzle-end so as to enable the carbines to be piled. The foresight is protected by wings, and the leaf of the back-sight works on a hinge and is raised as the distance of the target increases.

Finally the bolt-knob is bent down so as not to protrude, as is the case with the Infantry rifle.

Experiments took place in certain Cavalry regiments during the past summer, with a short side-arm capable of being fixed to the carbine, and which might also supplant the sword. According to reports from well-informed sources these experiments did not result in a conclusion satisfactory to the short side-arm.

The sword, the Cavalryman's original weapon, is to be retained.

Two Years' Service for Cavalry.—The question of reducing the service of the Cavalry and Horse Artillery from three to two years has now been definitely abandoned.

The reasons put forward in a monograph to the Reichstag are as follows :—

- (1) The squadrons could not mobilise in winter without calling up reservists.
- (2) The three years' men are required to train the remounts.
- (3) The three years' service provides men who are sufficiently good riders to serve in reserve units on half-trained horses.

RUSSIA

PRICE OF REMOUNTS

Russian Army Order No. 514/08 lays down the following as the average prices to be paid for remounts in European Russia and Siberia during the years 1909-13.

In European Russia

	£	s.	d.
(1) Well-bred saddle horses for Cavalry and Artillery	40	18	0
(2) Well-bred draught horses for Artillery	37	4	0
(3) Trained steppe horses (saddle, draught, and pack) for Cavalry and Artillery	18	12	0
(4) Unbroken Don and Kalmuk horses for Cavalry and Artillery	14	11	0
(5) Unbroken Astrakhan steppe horses for Cavalry and Artillery	18	0	0

In Siberia

(1) Saddle and draught horses for Artillery	21	4	0
(2) Pack horses for Mountain Artillery	13	6	0

Organisation, Equipment, &c.—Spurs, which have hitherto not been worn by Cossacks, will, in future, be included in the equipment of all ranks.

FRANCE

In the Grand Manœuvres, which took place South of the Loire, a most interesting experiment was made for the first time. Each of the opposing forces was brought up to the war strength of an army corps. To the Southern Army, under the command of General Treameau, were allotted two Cavalry divisions. To the Northern Army, under General Millet, was, on the other hand, posted a

Marine Infantry division, as well as a cyclist battalion. To make up the latter, four cyclist companies, 150 strong each, which belonged to the Chasseur battalions on the Eastern frontier, were brought from their garrisons (Stenay, Longwy, St. Michel, and St. Nicholas du Port) by wheel to the scene of the manœuvres, a distance of from 500 to 600 kilometres.

The marches performed amounted to about 70 kilometres per day, the heavy baggage, reserve ammunition, &c., following the cyclists on motor wagons.

At the manœuvres the cyclist companies were strengthened by the attachment of motors, Volunteer motorists, and machine guns.

The object of this assembly was to discover to what extent cyclists are able to oppose or assist Cavalry in the work of reconnaissance.

OBITUARY

Many Cavalry officers will feel with deep personal regret the loss of Lieut.-General Sir Henry Clement Wilkinson, K.C.B., who died on November 23, at Kenora, Ontario, aged seventy-one. He was a son of the late Rev. Percival Spearman Wilkinson, and joined the 95th Foot in February 1856. Transferring into the 17th Foot he was promoted lieutenant in August 1859. He transferred into the 16th Light Dragoons (now the 16th Lancers), and became captain in September 1863, major in July 1870, lieut.-colonel in July 1872, colonel in July 1877, major-general in March 1887, and lieut.-general in May 1894, retiring in 1899. He served with the 95th Foot in the Indian Campaign of 1858, and was present at the siege and capture of Awah; siege, assault, and capture of Kotah; battle of Kotakeserai; general action resulting in the capture of Gwalior; assault and capture of Rowa; siege and capture of Pouree; battle of Beejapore and affair of Koondry, receiving the medal with clasp. During the Afghan War of 1879-1880, he had the command of the Cavalry brigade in the force under Major-General Phayre, and in this capacity covered the latter's advance to Candahar after receipt of the news of the disaster at Maiwand, being mentioned in despatches and receiving the medal with clasp. In the Egyptian War of 1882 he commanded the Cavalry brigade of the Indian contingent, and was present at the battle of Tel-el-Kebir, being twice mentioned in despatches, receiving the medal with clasp, the Khedive's bronze star, and the Second Class of the Order of the Medjidie, and was awarded the C.B. In 1877 he was appointed Inspecting Officer of Auxiliary Cavalry, which post he held for two years, afterwards proceeding to India as military secretary to the Commander-in-Chief. During the eighties he commanded successively the Saugor and Presidency districts, and the Meerut, Rawul Pindi, and Allahabad Divisions. From 1891 to 1894 he commanded the North-Eastern District. In 1892 he received a distinguished service reward, and was appointed honorary colonel of the 4th Dragoon Guards in 1896. In the following year he was promoted K.C.B.

An English country gentleman of the old school, gifted with a charming personality, extraordinary versatility, and remarkable activity of mind and body, Sir Henry, when his service ended, spent the greater part of his time on his estate in Canada, where he became actively engaged in local enterprise and in the improvement of agriculture and stock-raising.

SPORTING NOTES

WE are indebted to Dr. T. Miller Maguire for calling our attention to the following interesting 'Notes on the Origin of Polo,' by Professor Parker, of Liverpool, who has kindly permitted us to reprint them from the Proceedings of the Anglo-Russian Society:—

THE ORIGIN OF POLO.

The earliest specific mention of *polo* is in the year 710, when the Emperor assembled his courtiers in the pleasure retreat known as the Pear Orchard, where a 'ball-court' had been laid out, and where 'sides were formed to assault the river,' the Emperor and Princes looking on. The game of 'assault the river' was simply our 'tug-of-war,' for it is described as being 'an enormous hempen cable with a score or more of small ropes at each end, several men to each rope; they tugged away until the weaker side gave in.'

Three years later the Pear Orchard was formed into a Histrionic School, where five hundred youths were trained in music, acting, athletics, and other arts calculated to contribute to the *menus plaisirs* of the luxurious court. In the year 717 Khoten—a country which has recently come into prominent notice through the explorations of MM. Sven Hedin, Stein, and Grenhard—sent as a 'tributary' present to the Chinese Court 'a couple of horses for playing at ball.' At that time the Turks had more influence over Khoten than the Chinese, and there can be little doubt that the game was introduced by them. The Emperor's sister, whose husband died in 728, was provided, whilst her husband was living, with a magnificent palace near the ball-court, and had this latter place extended for her benefit. This ball-court must have been very extensive, for there are several mentions of large bodies of troops being temporarily encamped there, and that horses were used in the game is plain from the following poetical extract: 'The good steed pursues the wind, playing in the ball-court.'

Moreover, there must have been polo courts at other places besides the capital, for it is related of a certain statesman who had been successful in making the young bloods more studious at King Chou (the present site of a Manchu garrison between Hankow and Ichang, on the river Yangtse) that the Emperor, who was himself a sportsman, criticised the Governor's policy in these words: 'I am informed that grass is growing on the ball-court at King Chou.'

The reply was: 'It may be so, your Majesty, but there is nothing to prevent the ball from passing to and fro.' It is not quite clear where the point of the joke comes in; but anyway, 'the Emperor showed his teeth,' by which I suppose is meant he 'smiled.'

At the close of the year 820 it is related in history that 'the Emperor himself played ball in the right army camp enclosure, and then went hunting west of the city.' The next year His Majesty did the same in one of the palace courts. The following year again this same Emperor, who seems to have been passionately fond of polo, made a party with his eunuchs, one of whom fell suddenly from his horse, 'as though some missile had hit him.' The Emperor was so alarmed at this incident that he ordered the game to stop. Retiring to his apartments he soon found himself unable to walk, got dizzy, and went to bed. For three days nothing was heard of him, and a few months later he died. His son and successor appears to have been a devotee to polo from the beginning of his reign, and a well-known statesman and general therefore thought it well to remonstrate with him and to request him to nominate an heir, 'for his late Majesty had been attacked by sudden illness brought on by playing polo.' The only result was that the infatuated monarch made up still more frequent polo parties, and distributed lavish presents to the successful players and to the minions of the Histrionic Hall.

From ancient times the province of Shantung has been celebrated for its football * games and its enormous donkeys. In the year 826 an official in this province sent up a present of some polo donkeys and four renowned polo players, and the Emperor lost no time in 'setting the army and the histrionic artists to make sides for a game of donkey polo.'

Later on in the same year His Majesty himself had a game in the palace ground with his eunuchs, and followed this up with a wine-party given to the four polo players and twenty-four others.

'The Emperor, being tipsy, entered his private apartments to change his clothes, when suddenly all the candles in the hall went out and a eunuch (who had conspired with his fellow eunuchs to do this) murdered him in his private room.' During the reign-period 841-846 it is stated that many high military commands were given in consequence of prowess in polo play.

From this time onwards we hear nothing more of polo in China proper, and it seems to have been confined to its inventors, the Tartars.

Touching the above-mentioned special skill of the Shantung players, a work published about the year 800 gives the following graphic account of a certain general who, like many others of that time, owed his promotion to his athletic qualities: 'He used to place a pile of ten coins in the polo court, and, galloping his horse, strike one off with his club each time he passed, knocking the coin up seventy or eighty feet into the air, such was his extraordinary skill.'

The decrepit successors to the once glorious T'ang dynasty (618-906) at last collapsed altogether; the last of them was murdered in 908, one year after a successful military adventurer had found a new ruling house. The T'ang dynasty, though Chinese, had from the beginning had a strong Turkish strain in its blood by marriage and concubinage, and, moreover, its earlier monarchs had lived on exceedingly intimate terms with its conquered rivals the Turks, from the Ouigour branch of whom no doubt the later monarchs derived their taste for polo.

* Football is now obsolete, or rather it has degenerated into 'foot-shuttlecock,' as described in *Badminton* for May 1897.

Meanwhile the whole of South China, province by province, was in the hands of native Chinese kings and 'emperors,' who declined to recognise the adventurer above mentioned. One of these reigned with great splendour at Hangchow (907-932), but he thought it prudent to send a congratulatory envoy to the new man in possession of the central territory and ancient archives.

The envoy was asked : 'What sort of thing does your master like ?'

The diplomat replied : 'He likes jewelled belts and fine horses best.'

The Emperor said : 'A heroic character, indeed,' and ordered a present to be got ready of one jewelled belt in a case and ten of the imperial 'ball-hitting' (i.e. polo) horses.

It is related of this monarch that one of his relatives was killed while playing polo by falling from his horse. The enraged Emperor ordered the execution of all persons who took part in that particular game. Meanwhile the Cathayan Tartars (corresponding to the vigorous Mongoloid race now called Solons by the Manchus, who employ them as picked corps on the Russian frontiers) had been steadily growing in power as the Imperial prestige declined. They also had once been subject to the Turks, but now most of the Turks had gone for ever far away to the west, and a few remaining tribes who had been in Imperial military employ set to work to oust the adventurer in possession.

By the year 923 one of the Ongut Turks (ancestors of Marco Polo's 'Prester John,' whom he mistakenly calls a Kerai Mongol) had obtained possession of the central throne. One of his first acts was to turn the altar grounds, where the ceremony of mounting the Imperial throne was usually carried out, into a polo court. This founder dying without issue, his adopted son succeeded to the throne, and it was under this able and conscientious prince that printing was first well established in China. The legitimate son had died in the year 926 whilst conducting a military expedition in another province. His personal estate was forwarded to the capital, and included seventy-two 'ball-beating horses.'

From the beginning of the tenth century to the middle of the fourteenth—that is, for four hundred and fifty years—North China, especially the Pekin plains and the province of Shantung, was exclusively under the rule of Tartar emperors—first Cathayans, then the ancestors of the present Manchus, and finally the Mongols. The Chinese dynasties ruling in South China were compelled to recognise these rival Cæsars as equals, and often sent them tribute under the convenient name of 'subsides.' Thus in the year 953 one of the ephemeral dynasties of Turkish descent ruling in Central China sent a mission to the Cathayan Emperor with a present of 'ball clothes and horses,' and His Majesty (a great drunkard) went to a place some distance west of Pekin to 'beat the ball.'

In the year 989 the then reigning Cathayan Emperor (who was, notwithstanding, really the best of his race) indulged to such excess in polo that a Chinese censor in his employ had to remonstrate with him very severely. There are two versions of this sermon : one in the ordinary course of Cathayan history, and the other in the chapter specially devoted to this particular censor. The remonstrance runs :

'At the risk of losing my head, I must protest against your Majesty's infatuation for ball striking and ball horses. In the first place, when sovereign and subject play together, it is unavoidable that there should be undue emulation, the triumph of the prince becomes the chagrin of his lieges, the joy of one of the

sides is necessarily the humiliation of the opponents. In the second place, whilst the horses are plunging about and the clubs flying in the air no attention whatever is paid to the difference in rank of the eager competitors, and all sense of courtesy and propriety disappears for the time: if the celestial garments [it would be treason to say "person"] should be struck during the greedy contest of moon-sticks a situation might arise in which the prince on the one hand would incur loss of dignity, whilst on the other it might be difficult to blame the subject. In the third place, to expose the dignity of a King to the risks of an exciting game is both unfair to the Empire to which a solemn duty is owing, and also unfilial to a Dowager who is anxious for her son's safety [she died in the year 1009]; for however good a horse you may ride, and however well beaten the polo ground may be, there is always a risk of a trip, a shy, or a failure to grasp the rein at the critical moment.'

It is related that the Emperor was much impressed, and, as we hear little more of polo after that, it is to be presumed that the remonstrance had proper effect.

About half a century after this event the Southern Empire (which Marco Polo calls 'Manzi') sent a mission to Cathay under a very celebrated and learned statesman named Chang Fang-ping. The Cathayan monarch was so struck with the dignity of his deportment that he turned to his courtiers and said: 'Lucky, indeed, to possess such a subject as this!' The account goes on to say that they had a game of polo together, and the Tartar monarch, beside presenting the envoy with his own polo horse, poured out wine for drinking a toast with his own royal hand.

Probably the Southern dynasty also occasionally played polo too, for it is related of another celebrated scholar named Wên Yen-poh that, when young and playing at ball-striking with other youths, someone knocked the ball into the hollow trunk of an old tree; such was the intelligence of the young man that he floated the ball out of the inaccessible hole by filling the trunk with water.

The Juché or Nüchén (Early Manchu) emperors who succeeded the Cathayans, and are mentioned by Marco Polo under the name Chorché, are several times mentioned in Chinese history as being players of polo. In the year 1163, after the new year's festivities, in which polo was included, it was ordained that the same games should be played each successive new year.

In the year 1201 the reigning Emperor allowed the people of Pekin to enter the palace precincts in order to witness a royal game of polo. This ruler, whose Tartar name was Matakó, used to make a summer retreat of a charming little pleasure temple in a village called Yüh-ch'üan Shan, a few miles outside the capital; in this identical temple the writer of these humble lines passed part of the summer of 1869.

When the mighty conqueror Genghis Khan was preparing to turn Matakó's successor out of China he took into his employ many Cathayans, who were of course only too glad to fight against their tyrannical masters, the Juché. One of these Cathayans is stated to have been a magnificent horseman and a particularly fine polo player. After Genghis' death his son Ogdai Khan took active steps to clear out the Juché, one of whose generals (bearing the name of Wan-yen Yen-shou) was defeated in battle owing to having allowed the Mongols to surprise him whilst he and his staff were indulging in a game of polo. 'Wan-yen' is the name of the original clan to which the reigning Manchu dynasty belongs.

The Mongols, who were great hawkers, are not mentioned as polo players ; still less the effeminate Chinese dynasty (Ming) which ejected them in turn. The Manchu emperors, who succeeded the Mings, have never played polo ; their exercise has always consisted in archery and wholesale hunting expeditions.

It is just possible that the earliest Chinese word for polo-ball (*liuk* or *chiuk*) may be the origin of the Persian *tchaugan*, and an invented Greek word, for Persian polo has been known to have been borrowed from the East.

RACING

The Aldershot Autumn Meeting was well patronised, and good sport was witnessed. On the first day the Open Military Steeplechase of two and a half miles only attracted two runners, and was won by Mr. E. P. Brassey's Manister Gate, Captain C. de Crespigny riding ; the other horse, Lord Gerard's Periwad (owner up), falling. On the second day the Past and Present Military Handicap Steeplechase of three miles secured six runners, and was won by Mr. C. Bewicke's Old Fairhouse (owner), with Mr. J. H. Charters's Peter the Great (owner) second, and Captain T. Godman's Kennilworth (owner) third.

In the Open Hunters' Hurdle Race there were twelve runners, and Mr. J. H. Charters won it on his own horse Kilsby, riding a good race.

The Salisbury Plain Cavalry School Point-to-Point Races were held near Andover, over a $3\frac{1}{2}$ miles course on Mr. R. Sutton's estate.

The Cavalry School Light-weight Race for Lieut.-General Baden-Powell's Challenge Cup was won by Mr. H. A. Tomkinson's (Royal Dragoons) May Day, with Mr. G. Bonham-Carter's (19th Hussars) Despair second. Nine started.

The Heavy-weight Race was won by Mr. G. A. Sanford's (20th Hussars) Spearman, Mr. Clegg's (8th Hussars) Broncho being second.

Sir Arthur Lawley, Governor of Madras, riding his own horse Tocsin, won the Ootacamund Hunt Cup, in a Point-to-Point over four miles of hunting country, by forty lengths from a big field of good riders. His A.D.C., Captain Heseltine, the well-known polo player, was second.

We have received a programme of the Naruo Hayashi Keiba Kwai Autumn Race Meeting in Japan. The sporting, up-to-date, and business-like way in which the Japanese race meetings are managed is an example to us, and many of our race companies would do well to adopt some of their methods.

This programme takes the form of a neat little blue book, and is printed in English. The meeting occupied four days, commencing at 10.30 A.M. Twelve races took place each day at half-hour intervals, lasting till 4.30 P.M. There were races for country-bred horses, Australian horses, and foreign-bred horses, distances varying from three-quarters to one and a half mile.

Scarcely any of the many races received an entry of less than twenty, and some of nearly seventy. To distinguish the different classes of horses saddle-cloths with coloured numbers were carried ; for instance, Australian horses black numbers, foreign-bred red numbers, country-bred blue numbers. On the last day of the meeting there were handicap races for all the previous winners in the different classes at the meeting, *compulsory* entries.

The following are some of the conditions: 'All horses declared to start and not competing may be fined any sum not exceeding 100 yen, or disqualified for the rest of the meeting.

'Declarations in writing must be deposited in box in the weighing-room kept for the purpose forty minutes before the race.

'Second prizes will be given only when there are at least four starters, and third prizes only when there are at least six starters. In case of a *walk-over* only one-half of the value advertised will be given, except running off a dead-heat.

'No horses are allowed to run more than once a day, the case of running off a dead-heat excepted.

'Should there be twenty-five horses or more to start in one race, the horses shall be divided into two classes—odd and even numbers of drawing the positions. All prizes advertised by the Association shall be given to the winners of both the races, who shall be liable to all the penalties attached to the winner.

'Programme or any rules or regulations are printed in English and Japanese; but should the former conflict with the latter, the latter is to be taken as correct.'

POLO

The semi-finals for the Inter-Regimental Polo Tournament at Hurlingham are fixed for June 29 and 30, and the final on Saturday, July 3.

The coming season at Cannes promises to be very popular. The club made a good start last season, and looks like being very successful under the management of Captain E. D. Miller. There are to be at least thirty ponies on hire during this season, which lasts till April 14.

The Quetta Tournament resulted in a win for the Flagstaff House team, which defeated the 1st Battalion South Wales Borderers in the final by 7 goals to 1. Players—*Flagstaff House*: Lieut. C. B. Wilson, Lieut. E. A. Fielden, Lieut.-Colonel J. Vaughan, D.S.O. (all 10th Hussars), and Major-General R. A. P. Clements, C.B., D.S.O., Commanding Quetta Division (back); *South Wales Borderers*: Captain G. E. E. Welby, Captain W. O. Prichard, Major H. G. Casson, and Captain A. J. Reddie (back).

The Tournament for the Begum of Bhopal's Cup at Jubbulpore resulted in a win for the 26th Light Cavalry.

The much regretted death of Mr. John Watson, late 13th Hussars, is a sad loss to sport, especially in the Cavalry.

The hunting and polo world alike mourn his sudden death from heart disease at the age of fifty-six. For the last eighteen years he has been best known as the brilliant Master of the Meath Hounds. At polo he was equally famous; the Freebooters team was founded by him, and in the 'eighties he captained the team that went to America and won the champion trophy, which has been kept in this country ever since. The great interest and good instruction he gave to soldier polo players, both in Ireland and England, are widely known. He was a splendid rider and judge of a horse, and celebrated not only as an amateur huntsman and

great polo player himself, but also for his ability to teach others to be proficient. The strenuous life he led, we fear, hastened the end, and, as he himself wished, he died in the harness of sport.

INTERNATIONAL HORSE SHOW AT BUENOS AIRES

The following officers were granted permission to attend the Horse Show at Buenos Aires, November 10 to 20, on the invitation of, and as guests of, the Sociedad Sportiva Argentina: Colonel A. J. Godley (General Staff, 2nd Division), Major Hon. J. G. H. H. Beresford, D.S.O. (7th Hussars), Lieut. G. F. H. Brooke (16th Lancers), Captain E. H. Bayford, D.S.O. (18th Hussars), and Second Lieut. T. H. Sebag-Montefiore (Royal Field Artillery).

In the steeplechase Major Beresford was second, and Lieut. Brooke sixth.

The broad jump was won by Lieut. Montefiore, and Lieut. Brooke was fifth.

Lieut. Montefiore, on Lottie, covered 8.50 metres (27 feet 10 inches).

The International Horse Show, 1909, will be held at Olympia from Saturday, June 5, to Tuesday, June 15.

The Royal Naval and Military Tournament will be held just before the Horse Show, from Thursday, May 13, to Saturday, May 29.

At the Royal Naval and Military Tournament, in addition to the usual officers' riding and jumping competition, there will be a jumping competition for combatant officers over a course similar to the one used at the International Horse Show, with the exception of the bank. This competition will be held daily throughout the Tournament, and prizes, value £25, £10, and £5, are offered for the final competition, to be decided on the last day.

Particulars of three military riding competitions to be held in conjunction with the Concours Hippique at Brussels in May 1909 have been received, and names of intending competitors have been asked for.

BOXING

The Army and Navy Championships were held, as usual, at Aldershot, and secured an entry of 216 as against 204 last year. Cups were provided for the officers' competitions, and in the N.C.O.s' and men's events the winners received £10 and a silver medal.

The contests lasted four days, commencing at 9.30 in the morning and lasting until 8 at night.

The keen interest taken shows how popular boxing is in the Services. Results:—

Officers' Finals

Feather-weights (9 st. and under): Sub-Lieut. J. A. Shuter, Royal Navy, beat Lieut. H. M. Powell, 1st South Staffordshire Regiment.

Light-weights (10 st. and under): Lieut. P. Newcombe, Royal Navy, beat Surgeon E. L. Atkinson, Royal Navy.

Middle-weights (11 st. 4 lb. and under): Lieut. R. D. Campbell, 1st Gordon Highlanders, beat Lieut. K. Hart, Royal Navy.

Heavy-weights (catch-weights): Lieut. G. M. Ellison, 2nd Lincolnshire Regiment, beat Captain G. W. Bentley, 4th Middlesex Regiment.

Warrant, Petty, N.C.O.s', Seamen, and Privates' Finals

Feather-weights: Corporal R. Darley, 1st Royal West Kent Regiment, beat Driver A. Windebank, Army Service Corps.

Light-weights: Lance-Corporal A. Baker, 1st Royal West Kent Regiment, beat Petty Officer G. Dunne, R.N. Barracks.

Middle-weights: Private J. Murray, 1st Scots Guards, beat Private J. Harris, Coldstream Guards.

Heavy-weights: Gunner H. Hewitt, Royal Marine Artillery, beat Sergeant T. O'Connor, 6th Inniskilling Dragoons.

Major-General H. M. Lawson, C.B., in the unavoidable absence of Lieut.-General Sir Horace Smith-Dorrien, presented the prizes.

With S. S. M. Mordaunt as M.C., the 18th Hussars gave a good tournament at the Curragh on November 21, when twelve contests took place. For the 8 st. 6 lb. championship of England, special prize £25, Tickler Lunt, Liverpool, defeated Kid Saxby, bantam-weight champion of Ireland.

In a ten-round contest Driver Beck, Army and Navy Champion, beat Harry Brown, Liverpool; but Trooper Cooke, the Household Cavalry heavy-weight champion, was on this occasion beaten.

BOXING ABROAD

At the Sirhind Tournament, which took place at Simla, the All India Challenge Trophy was carried off for the third year in succession by the 1st Battalion Gloucestershire Regiment.

Both the officers' heavy and middle weights were won by Lieut. A. M. Read, 7th Haryana Lancers. The prizes were presented to the winners by the Viceroy.

FOOTBALL

CAVALRY ASSOCIATION CUP

First Round

5th Lancers beat 8th Hussars (4—3, after extra time) at Colchester.

21st Lancers beat 11th Hussars (1—0) at Shorncliffe.

7th Hussars beat 2nd Dragoon Guards (Bays) (2—0) at Aldershot.

2nd Life Guards beat 1st Life Guards (2—0) at Windsor.

2nd Dragoons (Greys) beat R.H. Guards (2—1) at Tidworth.

16th Lancers beat 3rd Dragoon Guards (the holders) (3—0) at Aldershot.

Second Round

16th Lancers beat 7th Hussars (2—1).

2nd Dragoons (Greys) beat 2nd Life Guards (2—0).

19th Hussars beat 5th Lancers (2—1).

21st Lancers beat 4th Dragoon Guards (3—0).

18th Hussars beat 20th Hussars (4—3, after a tie).

The third round is to be completed by the end of January, the draws being 19th Hussars *versus* 18th Hussars, with the Greys, 16th, and 21st Lancers byes.

In the second round for the Army Rugby Union Cup the only Cavalry regiment left in, the 2nd Dragoons, were beaten by the 1st Leicestershire Regiment.

ATHLETICS

At the Professional Athletic Meeting at the Stadium Corporal Heaver, 2nd Battalion Lincolnshire Regiment, won the mile race in 4 mins. 29½ secs. by 3 yards.

At the Army Athletic Meeting Corporal Heaver also won the Army Championship for the same distance.

At the Aldershot Command Swimming Tournament Captain A. D. Musgrave, R.H.A., won the officers' 100 yards race.

The 200 yards inter-battalion race was won by the XIVth Brigade, R.H.A., the 16th Lancers being second.

TOURNAMENT

The annual competition for the Swan Trophy, which was presented by the late Quartermaster Swan in 1888, took place this year at the Naval and Military Tournament at the Scottish National Exhibition in Edinburgh.

The trophy, which is valued at 100 guineas, is for competition by teams of four from any of the Yeomanry regiments of Scotland, but there were only two entrants—namely, the Lothians and Border Horse, and the Fife and Forfar Imperial Yeomanry.

The competitors engaged in heads and posts, lemon-cutting, tent-pegging, and jumping, and victory went to the Fife and Forfar Imperial Yeomanry by a majority of nine points.

The Naval and Military Tournament proved a great success, the Royal Scots Greys taking a leading part in the various mounted events.

Brigadier-General Sir Robert Cranston, K.C.V.O., superintended the arrangements, and amongst other officers present was Lieut.-General Sir Edward Leach, V.C., K.C.V.O., Commanding the Forces in Scotland.

HOCKEY

A meeting of the Army Hockey Association was held at Aldershot, at which it was decided to establish an inter-regimental tournament.

Entrance fee was fixed at £1 per club, and it was agreed that matches should be played on dates to be fixed between February 1 and April 15, 1909.

GOLF

The annual tournament for the Army Challenge Cup was concluded at St. Andrews.

The final round was between the 1st Battalion Black Watch and the 1st Battalion Argyll and Sutherland Highlanders, the former winning by two points to one.

General Baden-Powell sends us the following account of an extraordinary fight with a lioness, extracted from the letter of an officer of the South African Constabulary :—

‘Constable C. W. Eagle, whom you complimented, shortly before you left, on the good work he had done in this district in connection with the preservation of big game, was returning to Messina from a three weeks’ patrol. On the 24th of last month, when within fifteen miles of his post, he passed a couple of Dutchmen, transport riders, who told him to “bos up” as they had shot a couple of lion cubs that morning and they knew that the lion and lioness were not far behind, and in fact were following their wagons. Eagle rode on, and very soon noticed the spoor of a couple of lions crossing the road. He turned on the spoor into the bush, and immediately came face to face with a lion and lioness.

‘Both the beasts were obviously in bad tempers and showed unmistakable signs of charging.

‘Eagle was carrying a light Lee-Enfield carbine, and, not feeling inclined to take both the brutes on single-handed, tried to turn his horse, but the animal refused to move an inch.

‘There was no time to be lost, and Eagle, who is a noted marksman, determined to have first smack, so, firing from his horse, he shot the lion through the body ; when he fired at the lioness she was actually charging, and his bullet broke her shoulder but did not stop her, and before he could fire again she was on him, knocking the carbine over his head and pulling him off his horse by his right hand, which she had seized in her mouth.

‘Eagle says his one idea then was to prevent the lioness getting him underneath. He had no weapon whatever, as he always carries his carbine instead of a revolver. Fortunately when pulled off his horse he landed on his feet, and with his right hand still in the lioness’s mouth he grasped her by the nostrils with his left.

‘An awful struggle between man and beast then ensued, in which the constable was badly clawed, though he states that at the time he did not feel it.

‘There was an eye-witness of this extraordinary fight in the person of an engineer named Scott, who, riding south from Messina, came suddenly on the combatants, who had then got into the middle of the road.

‘Scott was unarmed, and as his horse stood stock-still and refused to move he had to be a witness, whether he liked it or not.

‘What Scott saw was Eagle in the position described, kicking the lioness in the belly while she clawed at him. Presently the beast released Eagle’s right hand, and he then put his right arm round her neck, still holding on to her nose with the left.

‘Scott’s horse apparently thought it was time to go, and it turned round and bolted for Messina.

‘The struggle could not really have lasted more than five minutes, and the lioness had already had enough of it, for she broke away, and, going about twenty yards, lay down.

‘The lion all this time had been looking on, but he was badly hit and bleeding internally.

‘Eagle now tried to reach his rifle, but it was not until he had fallen down twice in the attempt that he discovered his right leg was injured ; he then

crawled to his rifle, but only to discover that his right hand was useless, for it had been chewed to pulp.

'Then he began to "see dark" and knew he was going to faint. With a desperate effort he dragged himself to the road, just as Scott returned with a transport rider and some natives.

'The lioness moved off into the bush, but they finished the lion with Eagle's carbine,

'Parties have been out after the lioness, but without success; she cannot have gone far, but the bush is thick and there are no dogs in the country.

'Eagle was taken to Louis Tirchardt, sixty miles, and thanks to an iron constitution he will probably pull through; but it is feared he must lose his right hand, and may be lame for life.

'Poor fellow, I don't know what will become of him, as the sort of life he has been living is the only one possible for him.

'He is now in Elim hospital and has been having a dreadful time of it.

'But what a fight!'

It is satisfactory to note that the international jury of the Franco-British Exhibition awarded the highest honour, 'The Diploma for Grand Prize,' to Messrs. Charles Lancaster & Co. for their exhibit of guns and rifles.

SCOUTING COMPETITION

The following is the result of the Aldershot Cavalry Brigade Scouting Competition for General Baden-Powell's Prize :—

21st Lancers, 472 marks	} out of a possible 525.
16th Lancers, 423 marks	
7th Hussars, 370 marks	

The winning team consisted of Lieut. D. C. Part, Sergeant Scammell, Lance-Corporals Pring, Brotherhood, Lawrence, and Saunders.

The Competition included three days' reconnaissance by patrols, travelling not less than thirty miles each day at six miles per hour, with two hours daily allowed for the actual reconnaissance, and concluding with a ride over fences.

Marks were given for each day's report, 50; for time each day, 40; for condition of horses, 180; and for jumping, 75.



THE LEGEND OF ST. GEORGE AND THE DRAGON.
Carved Oak Panel, said to have been brought from Rufford Abbey, Notts

From the Victoria and Albert Museum.

Late Fourteenth Century.

THE CAVALRY JOURNAL

APRIL 1909

ST. GEORGE THE PATRON SAINT OF CAVALRY

ONCE more St. George's Day (April 23) comes round. It is a sacred day for Englishmen and a sacred day for cavalymen all over the world.

We gave in our last April number a history of St. George, one out of the very many that exist, showing how the story of his fighting the dragon to rescue the fair Sabrina may probably have been the allegorical record of the work of Bishop George in converting the inhabitants of the Severn (Sabrina) valley to Christianity, and thus saving them from the dragon of unbelief.

The legend of his rescue of the fair Princess is well told pictorially on the panel of an oaken chest from Rufford Abbey which we reproduce as of interest to our readers. The whole story in three acts is depicted in the one picture.

In the left top corner we see St. George dismounted, with his horse in difficulties in a rabbit burrow, and the Princess standing by. She is evidently explaining her presence there by telling the Saint how she had been sent out to form the day's ration for a neighbouring dragon, who demanded from the city a maiden for his dinner daily.

Then in the lower left-hand corner St. George goes for the dragon while the lady resigns herself to her fate. By his attitude St. George has evidently never been pig-sticking, as he is using his spear on the near side and has got it between his horse's legs, to the imminent risk of his own neck. But he is putting some 'beef' into his thrust, so much so that it is difficult to understand how the dragon managed to survive it. This he did, however, for we see him in the third act, in the right-hand side of the picture, being led off by the Princess, evidently little the worse in body, though humbled in spirit by the encounter.

The Princess is generally represented accompanied by a lamb as a token of her innocence; the lamb in this case is not so innocent as entirely to trust the dragon, or at any rate the lady's girdle with which he is enchained.

St. George in the same way is generally accompanied by the British lion, who in this case, although taking no active part in the fight, is 'all there,' ready to chip in should it be necessary.

The pleased astonishment of the royal parents is shown by the way in which they have forced their heads through the very limited window space in the palace walls to witness their daughter's return with her strange captive and the smiling St. George.

The part taken by the rabbits is natural but not altogether dignified.

Shorn of the quaint humour with which the mediæval artist loved to adorn his subject, the character of St. George is, of course, typical of the Cavalry spirit. With a full sense of chivalry he went readily to the rescue of a woman in distress, and in spite of the various difficulties and dangers by which he was handicapped he persisted in his daring struggle, and, gradually overcoming all obstacles by his skill and courage, eventually scored a well-deserved success. Thus he remains a type and gives a lead for good cavalymen to follow.

R. S. S. B.-P.

***KAISERLICHES UND KÖNIGLICHES
HUSZAREN REGIMENT No. 12***

By B. GRANVILLE BAKER

THE threatened invasion of Austria by the French in 1800 gave the occasion for raising a regiment of Hussars in the Hungarian Districts of Jazygier, Kumanier, and Hajdick, the regiment which now is known by the number 12, and of which His Majesty King Edward VII. is honorary Colonel.

Amidst scenes of great enthusiasm the regiment was formed, for the loyalty of Hungary to the House of Hapsburg is of the strongest.

Officers of the standing army were posted to the new regiment, which was fully equipped and horsed by the devoted inhabitants of the districts referred to, and which was dedicated to their beloved King Franz II., Roman Emperor, for all time. The districts further bound themselves to keep the new regiment up to strength for ever. Archduke Joseph, Count Palatine of Hungary, and General of Cavalry, was appointed honorary Colonel, and the new regiment was styled Palatinal Hussars.

The regiment was soon completely equipped, and marched to Bruck-on-the-Leithe, from there to Wiener-Neustadt, where it was inspected by the Emperor and praised for its efficiency.

The uniform was light blue jacket, slung jacket, red breeches, black shako, and white buttons on yellow braid.

Colonel von Hertelendy had already a fine record of service. Born of poor parents in the Eisenburg district in 1754, he enlisted at sixteen in the 2nd Hussars, and was appointed Rittmeister in 1788, after thirteen years' service.

He was frequently mentioned in despatches in the wars against the Turks, notably at Kimpotung (September 16, 1789).

At Cassano in 1799 he earned the Cross of the Order of Maria Theresia. At Vaprio he distinguished himself greatly in the charges against Moreau's Cavalry, and at the Trebbia he was wounded for the second time. He commanded the regiment through all the misfortunes of Mak's campaign on the Danube, escaping from Ulm to Bohemia under the gallant Archduke Ferdinand, and was promoted Brigadier in 1808.

The regiment lost heavily during the operations on the Danube, which ended in the capitulation of Ulm; the greater part, however, fought their way through and distinguished themselves in the retreat to Nordlingen, capturing a number of the enemy's Cavalry, fifteen bread carts, and thirty head of cattle.

When the Peace of Pressburg followed the battle of Austerlitz, the regiment returned, *viâ* Vienna, to Felegyhaza to refit and replenish its ranks. This was accomplished in two months, thanks to the devotion and loyalty of the inhabitants. Canon Johann Janetz gave, as token of his regard for the regiment, the sum of 500 florins, to be devoted to the widows and orphans of the regiment, others followed his example, and a burgher of Szegecin, Andreivich, gave one Hussar, horse and equipment, maintaining him for two years.

Napoleon's decision in 1808 to create a new kingdom of Poland out of the Duchy of Warschaw led to a declaration of war in 1809, and the regiment marched to Krakau to join Field-Marshal Schaueroth's Army Corps. They were further reinforced by another Division of the regiment (two squadrons), which Countess Keglevits, *née* Countess Waldstein-Wartenberg, had raised at a cost of 50,000 florins.

The Peace of Vienna, October 14, 1809, and, in April of the following year, the marriage of Napoleon and Maria Louise, daughter of Francis I., took the regiment back to its quarters in Hungary.

Not for long, however, for on March 14, 1812, according to



KAISERLICHES UND KÖNIGLICHES HUSZAREN REGIMENT.—No. 12.



1800.

KAISERLICHES
UND
KÖNIGLICHES
HUSZAREN
REGIMENT.
No. 12.



1909.

a contract between France and Austria in case of a war with Russia, Austria mobilised an auxiliary corps of 80,000 men under Prince Schwarzenberg. Another corps of twenty-nine battalions and forty-two squadrons, under Prince Hohenzollern, was sent to Galicia to guard Austrian territory against aggression; the Palatinal Hussars joined this latter corps.

After Napoleon's defeat at Moscow the regiment joined Austria's so-called neutrality army in Bohemia; on this occasion the Emperor presented each officer with a pack-horse, a timely present, for the regiment was soon to be engaged in the great struggle that broke Napoleon's power in Germany.

On August 20 the truce expired, and Austria declared war. The 12th Hussars marched with the Austrian Army into Saxony, and took part in the battle of Dresden. On the first day of the battle of Leipzig it was engaged as advanced guard, on the second it assisted at the capture of Liebertwolkwitz, and on the third was recalled from the pursuit to support Count Tolstoi's investment of Dresden.

After the capitulation of Dresden the regiment marched west, and on January 16, 1814, at Basle, was ordered to act as a personal escort to Kaiser Franz, whom it escorted throughout the campaign that terminated in the triumphant entry of the Allies into Paris on April 15, 1814.

All ranks were decorated with a cross, surrounded by a laurel wreath, on the obverse :

Libertate Europae Asserta

1813

1814.

on the reverse :

Grati Princeps et Patria

Franciscus Imp. Aug.

worn on a yellow, black bordered, riband.

On April 25 five squadrons of the regiment escorted Maria Louise to Provins, and subsequently escorted the Emperor back

to Austria, then returning, *viâ* Pest, to quarters in Ketskemet, in Hungary.

Many grants and tokens of esteem, in the form of pensions, were given to the regiment by patriotic private persons on its return to its native land.

In 1815 the regiment marched again under Schwarzenberg, and took part, on Louis XVIII.'s return, in the manœuvres near Dijon.

Although the great questions that had troubled Europe for many years had been settled by Napoleon's incarceration on St. Helena, there was yet much work to do for the Palatinal Hussars.

We find them again in 1821 suppressing a military revolt in Northern Italy.

In 1833 the regiment marched to Vienna and received its colours from the hands of the veteran Kaiser, who died on March 2, 1835.

After moving about Hungary in several garrisons the regiment was called to Bohemia to suppress the 1848 riots, and in 1849 marched to Italy, and was stationed at Lodi and Cremona.

The year 1850 brought several innovations.

The term of service was reduced from fourteen to eight years, and the practice of transferring ill-behaved men to Infantry regiments was abandoned.

In 1859 we find the Palatinal Hussars in Italy again, taking part against the Italian nationalists, and quartered in Padua after those troubles were over.

Sabretaches were done away with, and only one standard retained in 1861.

In 1862 the regiment returned to Austria, and was stationed at Austerlitz and other quarters in Moravia.

But quiet days were not yet for the gallant Palatinals, for in 1866 we find them distinguishing themselves with traditional bravery at Nidelitz, Lochenitz, and Königgrätz.

Since then are none but peaceful records of changes of garrison, accoutrements, &c., among others the dissolution of Cavalry bands on February 22, 1867.

Such is the story of a regiment, raised from the picturesque Hungarian levies of the eighteenth century, recruited from a gallant and warlike race, which has carved its way, sabre in hand, through the most stirring epochs of military history. The gorgeous uniform of the original Hussars has toned down, though the red breeches and yellow braid yet remain to carry on the traditional national costume of Hungary. The present dress, light blue with black and yellow braid, silver buttons and white shako, is as neat and workmanlike as any Hussar may desire, and under the fur-edged dolman beat hearts as brave and gallant as those of their great Hungarian Hussar prototypes.

Cavalrymen of this country feel honoured that His Majesty wears the uniform of the 12th Palatinal Hussars.

SPECIAL NOTICE.

Owing to the continuous demand for Bound Volumes, the stock of the First Number, JANUARY, 1906, has been completely exhausted. Should any Subscriber have one or more copies of this Number (in good condition) to spare, would he kindly forward the same to—

The Managing Editor,

'THE CAVALRY JOURNAL,'

Royal United Service Institution, Whitehall, S.W.

**MOUNTED INFANTRY
AS DIVISIONAL MOUNTED TROOPS AND
WITH THE MOUNTED BRIGADE**

By COLONEL A. J. GODLEY, *General Staff*

Now that to the Mounted Infantry has been assigned the definite organisation indicated in the heading of this article, it behoves those of us who are interested in the subject to consider these rôles and the best way of performing them.

Before doing so it will be as well to call to mind the material and the amount of training that we have to work upon, the Mounted Infantry under discussion being, let it be understood, those which will be mobilised at home, for service with our six home divisions and two mounted brigades.

The regulations lay down that any officers, N.C.O.s, or men selected for training must fulfil the following conditions :—

Officers should have at least two years' service, power of command, and an aptitude for imparting instruction, must have been through a trained soldier's course of musketry, and should have some knowledge of horsemastership and be able to ride. Those selected to command companies should have already been through a Mounted Infantry training.

N.C.O.s and men must be fully trained Infantry soldiers, at least second-class shots, active, energetic, of good physique, and medically fit for mounted service, not of excessive weight, and thoroughly efficient and well-conducted soldiers. If possible, one-third of the strength of each detachment should consist of N.C.O.s and men who have been previously trained.

In practice, owing to the paucity of trained soldiers suitable for Mounted Infantry work in the average weak battalion at home, recruits who do not fulfil all the above qualifications have to be taken for training, and, not infrequently, a man either undergoes a Mounted Infantry course before he has done his trained soldier's course of musketry, or in some other respect the cart is put before the horse. The training at present lasts three months (from June 1, 1909, it will be four months), and, on mobilisation, owing to foreign drafts, there will be only a small percentage of the men called up from Infantry battalions for service with Mounted Infantry who will have had more than one, or at the outside two, of these courses of training. The reservists will probably have had several trainings, or possibly some continuous Mounted Infantry service, at the schools in India and Egypt or in the semi-permanent battalions in South Africa. The officers will, as a rule, have had still more experience, and at present, except in the very junior ranks, most of them have South African or other war experience.

I. DIVISIONAL MOUNTED TROOPS

Let us first consider what is the strength of the divisional mounted troops and what is required of them.

They consist of two independent companies of Mounted Infantry, each 150 strong, commanded by a major, and subdivided into four sections, each under a subaltern officer. This organisation corresponds as nearly as possible to the old two squadrons of divisional Cavalry.

'Cavalry Training' lays down the functions of divisional Cavalry (whose place the Mounted Infantry has taken) as follows: 'The divisional Cavalry assists the Infantry in the immediate protection of the division by supplying mounted men for patrolling in connection with the advanced, flank, and rear guards and outposts; maintains connection with the protective Cavalry; and furnishes escorts, orderlies, and despatch riders for the purpose of inter-communication generally.'

Again: 'The divisional Cavalry when employed with advanced, flank, or rear guards will be of the greatest assistance in acting as points and flankers, their mobility enabling them to examine a wide extent of ground. They will thus save the Infantry much exhaustion and afford effective protection. When attached to the outposts by day they may be employed for reconnaissance or as standing patrols. When communication within the outposts cannot be maintained by signalling or the use of cyclists, the divisional Cavalry will furnish sufficient mounted men with the supports and the reserves for the purpose.' And, finally, 'in addition to their usual duties, the divisional squadrons during the preparatory stage of the engagement should detach patrols to watch the flanks of the division to which they belong. It will often happen that detachments of Infantry get separated for long periods from their division; these should know the state of affairs of their division and of the main force, and must therefore be supplied with a few mounted men for the purpose.'

Most of these duties can be performed by the Mounted Infantry, as at present trained, fairly efficiently, though it cannot be expected that the Mounted Infantryman, trained as he now is, will always be as reliable an orderly or despatch-rider as a Cavalryman.

But, now that we have regularly organised communication companies in a division, with their network of telegraphs and telephones, and their establishment of signallers and cyclist and mounted orderlies, the divisional mounted troops may be relieved of many of these duties, and, instead of being frittered away in the performance of them, may be used, under the direct orders of the divisional general, as a concentrated, and therefore by no means negligible, unit of mounted men.

It must be remembered that they are absolutely the only mounted troops at the disposal of the divisional commander, and, though it is true that any army of which the division forms part will (except under special circumstances, when it might be taken to reinforce the independent Cavalry) be covered by a

protective mounted brigade, the divisional commander will none the less look to them for information and for his immediate security. Now, to provide information means reconnaissance, and the Mounted Infantry can no longer afford to look upon this as purely Cavalry work, but must be prepared to accept it as part of their training, and consider how it can best be taught in the short time at their disposal.

For various purposes the Mounted Infantry will often be called upon to hold an extended line in advance of the division, and for this their Infantry and the present Mounted Infantry training should fit them well. By this I do not mean the holding of an outpost line which can equally well be done by Infantry, and which is therefore a waste of mounted men, but the occupation of a false position ~~to~~ cover and screen the movements of the division, in advance of that which would be occupied by outposts. On the commencement of an action the Mounted Infantry, possibly extended as above indicated, should be concentrated either to a flank, from which they can operate in conjunction with the Infantry, or elsewhere, in reserve, to be used as occasion demands.

On the many uses to which in this way their mobility will enable them to be put, such as the reinforcement of threatened points, the seizure of vantage points in advance of the slower-moving Infantry, the counter-attack, the turning of the enemy's flank, &c., I do not propose to enlarge. The point I wish to emphasise is that, as the only mounted troops with the division, the Mounted Infantry must be prepared to undertake such scouting and reconnaissance work as may be required by the divisional general, and to carry it out no less efficiently than the Cavalry which it has replaced.

II. WITH THE MOUNTED BRIGADE

For the present the mounted brigades will consist, one of two regiments of Cavalry, one battalion of Mounted Infantry, one battery of Horse Artillery, and an ammunition column; the other, of two battalions of Mounted Infantry, one regiment

of Cavalry, and similar Artillery units ; and they will take the place of the old protective Cavalry or Cavalry screen. Their *raison d'être* is to free the Cavalry division for independent strategical action, under the orders of the Commander-in-Chief, by providing commanders of armies with a force of mounted troops for their immediate use and protection.

Each Mounted Infantry battalion consists of three companies, and is 450 strong, of all ranks.

Now, when the opposing forces are at a distance, two of the chief duties of the protective Cavalry (now the Mounted Brigade) will be :

(i) To afford the commander of the force it may be covering, timely information regarding the enemy's approach.

(ii) To furnish information regarding the tactical features, resources, and roads of the country in advance of the main body.

To carry out these duties the Cavalry will have to scout and operate far afield, supported by the Mounted Infantry, who also act as escort to the Horse Artillery battery. This is unquestionably the right method of using the respective arms, but in practice and on service, when it becomes largely a matter of horseflesh, I am doubtful if it will last.

The Cavalry will not stand being sent out day after day in front, doing all the reconnaissance and hard work, while the Mounted Infantry are dismounted and probably off-saddled and grazing for hours behind some hill which may form an important *point d'appui* ; and the end of it may be that the Cavalry and Mounted Infantry will each have to take their turn in performing these duties in the field, and the brigadier will be forced to regard his brigade as so many units (squadrons or companies), and, irrespective of whether they are Cavalry or Mounted Infantry, to look to them all to share the work equally.

If I am right, we are again faced with the necessity for training our Mounted Infantry in the duties of scouting and higher reconnaissance on a scale far in advance of that which has hitherto been contemplated at Longmoor.

Of the other duties, in general co-operation with the Cavalry, that will fall to the lot of the Mounted Infantry in the mounted brigade, such as the formation, with the Horse Artillery, of pivots of manœuvre for the Cavalry, the holding of tactical positions on a flank, &c., there is little that need be said in this connection. They form the Infantry backbone (none the less Infantry because they are mounted) of this most useful force of the three arms, and for attack and defence, outpost duty, and support to the Cavalry, there is no reason to fear that their Infantry training, supplemented by the instruction in the Mounted Infantry drill and tactics, horsemanship, and horse-mastership which they now get at Longmoor, will not prove amply sufficient.

At the same time, in order to ensure satisfactory co-operation, it will be most necessary that the Mounted Infantry should have opportunities of working with Cavalry. A situation in which their help might be invaluable, but which would require much practice, would be one where, by a previously concerted plan, at the moment when the Cavalry charge took place, their fire should be brought to bear, perhaps from a concealed position on a flank, on the heads of the enemy's attacking squadrons.

And there are no doubt other ways in which a resourceful mounted brigade commander could, with practice, so use this force of trained Infantry at his disposal as to render the chances against Cavalry pure and simple very much in his favour.

It is to be hoped, therefore, that mounted brigades will frequently be formed at manœuvres, and that the Mounted Infantry may thereby get practice in working with the two other mounted arms.

But the burden of my tale is that the Mounted Infantry of the mounted brigade and the division may be at any time called upon to perform duties for which hitherto Cavalry have been employed, and means must be devised by which they will receive such training as will ensure them against failure or unfavourable comparison when the hour of trial comes.

THE BATTLE OF WARBURG

By COLONEL H. PEARSE

IT is strange that Minden (fought August 1, 1759) should be the only battle of the Seven Years' War the name of which is familiar to English ears, and of which the anniversary is still faithfully observed by the Infantry regiments which fought there. Minden is indeed a glorious memory for the Infantry, and one to which the Artillery can look back with its usual happy consciousness of duty well done; but to the Cavalry, though by no fault of its own, the day of Minden is one of bitter memory. The fine opportunity offered then to the British squadrons was lost through the disgraceful inaction of Lord George Sackville; and Prince Ferdinand of Brunswick, the Commander of the allied army, had to rest satisfied with a victory, instead of securing the complete destruction of the hostile army. The sequel of this episode is well known. Lord George Sackville resigned the command of the British contingent, returned to England, demanded a court-martial, was found guilty of disobedience of orders, and 'adjudged unfit to serve His Majesty in any military capacity whatsoever.'

The Marquis of Granby, a Lieutenant-General aged 38, who had been second-in-command to Sackville at Minden and had succeeded him in command on his leaving the army, showed the most chivalrous generosity in giving evidence at his court-martial. 'So far from exaggerating the minutest circumstance,' writes Horace Walpole, 'he palliated or suppressed whatever might load the prisoner, and seemed to study nothing but how to avoid appearing a party against him—so inseparable in his bosom were valour and good nature.' The court-martial over, Lord Granby



THE MARQUIS OF GRANBY

(Colonel of "The Blues").

1760

Representing the incident at the Battle of Warburg.)



THE THIRD HORSE, OR CARABINEERS, AT THE BATTLE OF WARBURG.

(31st July, 1760.)

resumed command of the British army in Germany, which eagerly awaited the opportunity, which it hoped the campaign of 1760 would afford, of wiping out the stain left by Sackville's disloyalty. The opportunity, as we shall see, soon came, and we shall see too how Granby and his Cavalry seized it.

The campaign of 1759, perhaps the most notable year in our military history, was carried so late into the winter that the allied armies rested in their cantonments until early in May, 1760, when they made a general advance to the south and east, covering the whole of Hesse. The French armies, even more exhausted, were unable to move for yet another month, when a series of advances and retirements took place, each commander watching for an unguarded move on the part of his opponent.

Marshal de Broglie, the French Commander-in-Chief, had a great superiority of strength, and the allied armies only held their own by much exertion, as appears from a cheery letter written by Lord Pembroke, one of Granby's Cavalry Brigadiers. 'De Broglie,' he writes, 'is with an incredible mob full double ours, whatever political falsifiers may say in England. We have too many perpetual rouses for correspondence, and very little rest or belly-provender in return . . . for never poor devils lived harder, or earned their pay more than we all do . . . lying on one's arm night after night in damned bad weather, sleeping and starving *au bivouac*, or on a stone under a hedge. Notwithstanding all this, as poor beggars generally are, we are vastly jolly and happy.'

Late in June the French were ready to move, and De Broglie advanced northward towards the River Ohm, which, through the unauthorised retirement of a German general, he crossed unopposed. This brought him face to face with the allied army, and for a whole fortnight the hostile hosts lay within two hours' march of one another, neither daring to attack. At length De Broglie broke away by a night march to the north-west, and on July 10 defeated at Corbach the Corps with which Prince

Ferdinand endeavoured to check him. He then joined hands with the second French Army, that of the Lower Rhine, under the Count de Saint-Germain. It may be mentioned that, though Corbach was a defeat, the 1st and 3rd Dragoon Guards earned high distinction there in covering the retirement of the allied corps.

Prince Ferdinand's strength was now reduced to 66,000 men, while the united French army numbered 180,000 ; but on July 16 a detachment sent by the Prince, under his nephew the Hereditary Prince of Brunswick, to attack the French lines of communication, fought the gallant action of Emsdorff, in which the newly raised 15th Light Dragoons earned the highest distinction. This brilliant affair greatly increased the confidence of the Allies, and Marshal de Broglie found it necessary to take decisive action.

Dividing his force into three bodies, he threatened Prince Ferdinand in front and on both flanks, compelling him to fall back to the north-west, and then sent the Chevalier de Muy (who had succeeded to the command of Saint-Germain's army) across the Diemel to Warburg in order to cut off the Allies from Westphalia.

Seeing that he too must act with vigour, Prince Ferdinand sent reinforcements to Cassel (his fortified base, which was threatened by De Broglie) and prepared to attack with his whole remaining force De Muy, who with 30,000 men had taken up a strong position on an elevated plateau, his right in the little town of Warburg and his left on the heights of Ochsendorf.

Prince Ferdinand, who was at Kalle, despatched on July 29 two columns under his nephew the Hereditary Prince of Brunswick and General Spörke, and, finding on the 30th that De Broglie could not interfere with him, determined to attack De Muy early on July 31.

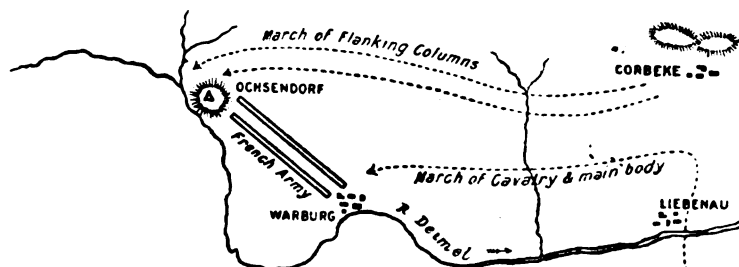
Spörke and the Hereditary Prince, it was decided, should attack the French left, while Prince Ferdinand with the main body was to cross the Diemel at Liebenau, swing round to the left, and attack De Muy in front.

This movement gave the main body a very long march, and it would obviously be no easy matter to bring off the two attacks simultaneously.

The two flanking columns, aggregating 14,000 men, marched off from Corbeke at six in the morning. It was already evident that the main body would be late. The northern column, that of the Hereditary Prince, was headed by the Royal Dragoons, and at the head of its Infantry marched two battalions, formed of the Grenadier companies of the British contingent, commanded by Colonel Beckwith, a name famous in our fighting annals.

General Spörke's (the southern) column was led by the 7th Dragoons, and its Infantry was headed by Keith's and Campbell's Highlanders, two regiments subsequently disbanded. Thanks

SKETCH MAP OF THE BATTLE OF WARBURG. (From 'Operations of the Allied Army.')



Distances : Liebenau and Corbeke to Warburg, about 10 miles in a direct line.
Warburg to Ochsendorf, about $2\frac{1}{2}$ miles.

to the use of a deep valley and to the protection of a fog, the flanking columns—which had but ten miles to cover from their bivouac at Corbeke—escaped the observation of a strong reconnoitring party sent by De Muy to watch his front, and arrived unperceived, at about 11 A.M. on the left flank of the French position. The main body, which had marched at nine the previous night and had been delayed by crossing the Diemel, was still far away ; but the Hereditary Prince, an ardent and impetuous soldier, decided to take advantage of the surprise caused by his unexpected arrival and to attack at once.

In rear of the French left stood a high round hill, crowned

with a tower, which the French had neglected to occupy. While the British guns came into action by the village of Ochsendorf the British Grenadiers, headed by Colonel Beckwith, filed through the village and advanced towards the hill. On seeing them a French battalion of the left was sent to occupy it, but Beckwith with ten Grenadiers ran forward and arrived first at the summit. The Prince with thirty more men quickly followed him, and the little party held the hill until reinforcements came up. After this both sides received successive additions of strength, and for four hours a stubborn fight continued on the hill. On the whole the allied troops held their own well, but numbers were much against them, the troops that had been longest engaged were much exhausted and had sustained heavy losses, and the result hung in doubt.

Now, however, occurred the incident which made Warburg a famous Cavalry fight.

During these four strenuous hours on the French left the main body of the allied army had been straining every nerve to come to the aid of the flanking columns. 'General Waldegrave,' writes the anonymous chronicler of the campaign, 'at the head of the British Infantry, pressed their march as much as possible ; no troops could show more eagerness to get up than they did ; many men, from the heat of the weather and overstraining themselves to get through morasses and difficult ground, suddenly dropped down on their march. His Serene Highness then ordered the Marquis of Granby to advance with the Cavalry of the right wing, who, with General Mostyn at the head of the British, advanced with so much expedition, bringing them up to a full trot, though the distance was near five miles, that they arrived time enough to share the glory of the day.' This indeed they did, and much more, for the timely arrival of the Cavalry quickly turned the scale and converted the doubtful fight of the flank columns into a complete victory.

The incident of the arrival of Granby's squadrons on the scene is vividly described in Fortescue's 'History of the British

Army': 'The pace was checked for a moment as the squadrons formed in two lines for the attack. In the first line from right to left were the 1st, 3rd, and 2nd Dragoon Guards in one brigade, the Blues, 7th, and 6th Dragoon Guards in another. In the second line were the Greys, 10th, 6th, and 11th Dragoons.¹ Then the advance was resumed, Granby riding at the head of the Blues, his own regiment, and well in front of all. His hat flew from his head, revealing a bald head which shone conspicuous in the sun, as the trot grew into a gallop and the lines came thundering on. The French squadrons wavered for a moment, and then, with the exception of three only, turned and fled without awaiting the shock. The scarlet ranks promptly wheeled round upon the flank and rear of the French Infantry, whereupon the three French squadrons that had stood firm plunged gallantly down on the flank of the King's Dragoon Guards and overthrew them. But the Blues quickly came up to liberate their comrades, and the devoted little band of Frenchmen was cut to pieces. The French Infantry, finding itself now attacked on both flanks, broke and fled; and the whole of De Muy's men, horse and foot, rushed down to the Diemel, and, without even looking for the bridges, threw down their arms and splashed frantically through the fords.'

Then the three brigades of British Artillery, which under Captains Phillips and Macbean had accompanied the Cavalry at a speed which amazed all beholders, came down to the river-bank at a gallop, opened fire on the fugitives, and prevented a rally. Prince Ferdinand now came up with the Infantry of the main body, and ordered Lord Granby with twelve British battalions and

¹ The Blues and King's Dragoon Guards had each three squadrons in the action; all the remaining regiments had two squadrons. Thus there were fourteen squadrons in the first line and eight in the second. The right brigade of the first line was commanded by Brigadier-General Webb, and the left by Major-General Honeywood; the right brigade of the second line by Major-General Elliot (afterwards Lord Heathfield, the defender of Gibraltar), and the left brigade by Lord Pembroke. Lord Granby commanded the first line and Lieutenant-General Mostyn the second.

ten squadrons to cross the river in pursuit. This he did with a will, and the fragments of De Muy's corps retreated in disorder to Volksmarsen. The French loss was estimated at from six to eight thousand men killed, wounded, and prisoners, and they also lost twelve guns. The Allies' casualties numbered 1200, of which 431 fell upon the Grenadier battalions. The British Cavalry, thanks to the decision with which it was handled, came off with losses slight in comparison with those which it inflicted, having two officers and thirty-two rank and file killed, and seven officers and eighty-seven men wounded; 215 horses were killed or wounded.

The victory of Warburg achieved Prince Ferdinand's object of keeping open his communications with Westphalia and relieving Hanover from menace, though his operations were soon afterwards paralysed for a considerable time by the loss of Cassel.

Great satisfaction was caused in England by the Prince's despatches, in which he informed King George that 'My lord Granby a infiniment contribué avec la Cavallerie Anglaise au succès de cette action.' In his order to the troops Prince Ferdinand, whose praise was worth earning, directed that his thanks were 'to be publicly given to Lord Granby, under whose orders all the British Cavalry performed prodigies of valour, which they could not fail of doing having his Lordship at their head.'

An interesting letter from Colonel Pierson, an officer of the Guards, is quoted in Mr. W. E. Manners' 'Life of John, Marquis of Granby': 'I may speak of Lord Granby in a way he can't do of himself. There never could be a day more for the honour of the English Cavalry, of which Lord Granby put himself at the head and charged in the manner that was always expected of him. Neither horse nor foot could stand against it, and a general confusion ensued as soon as they began to act.'

Carlyle's translation of a passage from Mauvillon's 'Life of Prince Ferdinand of Brunswick' is so vigorous that it, too, must be quoted: 'It was in this attack that Lord Granby, at the head of the Blues, had his hat blown off, a big bald circle in his head

rendering the loss more conspicuous. But he never minded ; stormed still on, bare bald head among the helmets and sabres ; and made it very evident that had he, instead of Sackville, led at Minden, there had been a different story to tell. The English by their valour, and he, greatly distinguished themselves.'

So the Cavalry at Warburg wiped out the undeserved reproach of Minden, and Granby became the popular hero in England. Soon his portrait swung before countless inns, replacing, as Walpole tells us, that of the Duke of Ormond, the old Cavalier ; and here and there it is still to be seen, though few remember the reason. The Cavalry, however, would do well to keep green the memories of Granby and the battle of Warburg.

TRACKING IN THE DESERT

By KAIMAKAM VON DUMREICHER BEY, *Commanding the Desert*
Directorate of the Egyptian Coastguard

Communicated by LIEUT. C. W. HERRINGHAM, *Inniskilling*
Dragoons

Observations on the changes which take place in tracks—Some of the differences which are observable in tracks made by different people or by the same people under varying circumstances—Precautions when seeking and taking the evidence of trackers.

WHEN anything moves on the sand it leaves marks. These disappear quickly among dunes or in places where the sand approaches the consistency of dust, remain for a considerable time when the sand is heavy and lies close, and if traces of loam, clay, or gypsum be present, show for weeks and months. It is natural that this should be so. They are little subjected to the action of rain or vegetation—the two greatest agents of superficial changes—or to that of violent and continuous winds; and good firm sand is less disturbed by moderate winds than would at first sight appear possible. When tracks cross one another individual foot-marks are often completely trodden out; but it is rare for a whole track to be obliterated, even in places where there is a concentration of traffic, and such places are few in the desert.

Although it lasts for a considerable time, a mark does not remain always the same. In the first few days it goes through a series of minute but distinctly perceptible changes, which, taken with other indications, serve to determine its age. All footprints, when quite fresh, show sharp edges on sand, all the lines of the foot are well defined, and the ruggedness of the sole forms veins on the light sand. Before long, however, the edges

of the track will gradually fall in, and the lines in the sand will become indistinct. There are other indications which will enable a tracker to determine with some precision the time of day when the track was made. The tracks of men and camels marching in the dark are different from those made during the day : they are less straight, lead over hard ground, and stumble over stones and bushes. In the early morning, when dew is falling, more sand is thrown out of a track than when the desert is dry, and such sand remains clotted, and the whole track has for the first two days a reddish appearance. In the morning and in the late afternoon, when the sand is cool and pleasant, the Bedouins generally walk without sandals, but they put them on when the sand gets warm. At mid-day caravans generally take a few hours' rest ; the camels lie down instead of grazing, and the Bedouins try to find shelter from the sun. The manure of a camel contains, even in summer, considerable moisture during the first day, and a Bedouin will tell with great precision when the last trace of moisture should have disappeared, which is generally on the second day.

The process of alteration, however, soon comes to an end, or goes on so gradually as to be no longer observable, and from this time onward the mark furnishes no possible evidence of its date. It is difficult to say to what cause these changes should be referred, but they are in part at least affected by the character of the soil, the amount of moisture which it contained when the mark was made, by the number of dews which have fallen on the track, and by the action of the wind. But if difficult to account for, the changes of which I speak are easy to recognise, and it is this which is important for the present purpose.

A track which is, after all, merely the series of marks made by a particular person or animal, may be, and by the Bedouin always is, considered from two points of view.


In the first place, it has an individuality of its own which distinguishes it from all other tracks whatsoever : no two men

or animals leave the same record in the sand, and no man or animal can leave any record but that which is personal and peculiar to himself. The size and shape of the footprints, the distance between them, the outward turn of the feet, the space between the toes or claws, the drag of the hind legs—these features and many others are combined in any track in a manner which is never repeated a second time. For the desert man each combination is a thing as truly individual and as little to be confounded with anything else as a face or a picture; and when he has examined it, and fixed it in his memory, he is able to recognise it again under all its changes of appearance. He will identify the tracks of a full-grown camel as those of an animal of whose tracks he had taken notice when it was two years old, and this with as little difficulty as an ordinary person experiences in recognising a man he has known as a boy.

In the second place, marks are significant, and tell something about the person or animal to which they belong, and the circumstances under which they were made. They admit, in fact, of classification.

All of us can tell a man's footprint from a buffalo's or a dog's from a horse's, and with such ease and certainty that we never think how to do it. A trained observer draws inferences much less obvious, but with the same certainty and unconsciousness. Besides the personal and peculiar features of each animal, there are particular features common to the tracks of all camels when they trot, which are not seen when they are going at any other pace. To notice this appearance and draw the inference from it is with Bedouins a process so instantaneous and so habitual as to resemble intuition. In like manner, the footprints of Sudanese, whatever may be the differences between them individually, all exhibit peculiarities, which it is vain to look for in the tracks of 'fellahs' or Bedouins. The Sudanese is invariably flat-footed, shows no instep, and has square toes. Men leave different marks from women and children, a young person from an old, a runner from one who walks. The footprints of a man

are coarser and larger than those of a woman, the stride is longer. A woman's foot is small, thin, the instep more elegant, her stride is short. A woman with child has a still shorter stride, and is heavier on her heels. A child's track is sometimes like a woman's, except that the foot is not so well formed, and that it is narrow in front. If a man runs fast, his stride is twice as long as when walking, his heel does not touch the ground, his toes dig deeply in and throw back a certain amount of sand according to the softness of the ground. The track of a laden beast is different from that of a beast going light, and in exactly that point of difference resembles the tracks of other laden beasts. These are a few examples, but they might be multiplied indefinitely.

In drawing these inferences and others like them, attention is not confined merely to the individual marks; account is taken of how they stand one to another and of the appearance of the track as a whole. For instance, if on the limestone plateau of the Lybian Desert, where tracks show badly, a Bedouin sees on a patch of sand as large as the palm of one's hand the curved line of the near fore-foot of a camel, and next to it at the same level the straighter line of the off-hind, like this , he will know at once that these footprints are those of a camel going at an amble of at least seven miles an hour. At the same time, as only thieves and smugglers are in a hurry in the desert and go at a speed of over four miles an hour, he will immediately draw the inference that the track is suspicious and will follow it up. He will be able to estimate, with great accuracy, the pace of the camels he is chasing by noticing the juxtaposition of the footprints. For instance, if a full-grown camel ambles at the rate of five miles an hour, the toes of the off-hind foot reach up to the level of the back of the near-fore; if the pace is increased to seven or eight miles, both near-fore and off-hind will draw up to the same level, and, if the pace be still increased, it will be safe to add one mile more an hour for every two inches by which the off-hind over-reaches the level of the near-fore; for instance,

if the distance between the near-fore and off-hind is twelve inches, one can conclude that the camel is going at a very great speed of about fourteen miles an hour. At the same time a camel going at this speed will throw back a considerable amount of sand. In like manner the tracks of a gazelle at a walk are only a few inches apart; its stride when in full flight is sometimes more than seven yards.

A knowledge of tracks is not the secret of an initiated few, but rather the general lore of the desert and common heritage of all who dwell therein.

Sagh. Royle, who is probably the European who knows the most about tracks in Egypt, and who can follow a trail on favourable ground without a guide, relates the following story:—

‘There were five flocks of sheep and goats—averaging perhaps ninety to one hundred and fifty head each—watering at a well at the same time. When they went away in different directions and we started filling our tanks, a Maaza Bedouin woman returned. We asked her what she wanted, and she said that three of her goats had gone off with some of the other flocks, and she identified the tracks of all of them, and found to which flock her goats had attached themselves, and went and got them, though the flocks had by this time gone out of sight. Subsequently she passed the well with her goats, thinking nothing of what she had done.’

Track-reading is a body of knowledge acquired during ages in a school where every theory is sifted and mistakes come home to those who make them in the form of suffering and loss; and it has been built up under the eye of a race who, because they could not help being experts, were obviously critics as well.

This is the reason why twenty Bedouins taken at random will read an average track in the same way. Where it becomes indistinct or confused, or from any cause difficult to interpret, some will show themselves cleverer than the rest.

It is instinct with the Bedouin to invoke the evidence of the sand to confirm his own story and refute his adversary; and

when he shuffles or prevaricates, nothing brings him so severely to reason as confronting him with the one kind of proof which he knows is impossible to distort. These beliefs explain the attitude which he takes up in his dealings with people who know nothing of tracks. He assumes at once that they know nothing of anything, and to tell them the truth is simple wastefulness.

When called upon to act in judicial investigations, the evidence of trackers will require to be carefully controlled and will need careful criticism. Though the experience of a lifetime is required to read and follow up a track, it is an easy matter to control the trackers when they are at work. It is always advisable to ask two trackers to read and explain in detail the tracks which they follow, and if their evidence, taken separately, agrees, it can safely be accepted. The track-readers should fall into line with other expert witnesses, and their testimony has the strength and weakness of that kind of evidence. This is as much as to say that track-reading is not an exact science like that of finger-prints. It is, however, the only means in the desert of bringing the crime home to its author with reasonable certainty. When fairly and discriminately used, it is at least a very valuable auxiliary to other methods of proof, and often is the sole means of supplying the missing link in the chain of evidence.

The chief difficulty of obtaining clear and well-reasoned evidence of identification of a track lies in the fact that the tracker is only accustomed to give explications to persons versed in the art ; while the authority conducting the inquiry is often unacquainted with the salient characteristics of tracks.

In order that evidence of this nature may be utilised with profit in judicial investigations, it is of great importance that the authority conducting the inquiry be able to follow and ascertain from the tracker the means by which he identifies a track. The tracker should explain to the investigating official on what sort of soil he followed up the track, whether and how often he lost it, and by what marks he identified it when he picked it up

again. Secondly, it should be made absolutely clear what positive information the tracker actually reads in the track, and, on the other hand, what indications he noticed in the track which led him to form an opinion which might go beyond the limits of his observations.

When employing trackers, the following cautions should be observed: Firstly, do not choose a tracker who is connected with the locality of the crime or the families and tribes concerned in it. Bedouins respect no law but the *mores majorum* which have come down to them from the night of time. Their sense of kinship and its obligations is vivid, and their hatred lasting and thorough. Secondly, when trackers are at work, the less they are disturbed the better. Though wanting in public spirit and respect for abstract authority, Bedouins are just as anxious as anyone else to give the concrete authority who happens to be near them the answer they think he wants to have. So when an important investigation is being made, he will do well to conceal his mind. Thirdly, it is also advisable always to employ trackers whose tribe lives hundreds of miles away from the locality of the crime. If these trackers come from remote parts of the Bisharin Desert, where the Bedouins have not learned the artifices of telling complicated lies, and if such trackers, as is often the case, do not speak Arabic, and in consequence can hardly be influenced by their surroundings, it seems to me reasonable to assume that they will run down their quarry with the eagerness and reliability of a faithful sporting dog.

Six years ago I received a report that a Coastguard patrol, consisting of one shawish (sergeant), four anfar (private soldier), and one tracker, had stolen some natron from the Wadi Natroun, and had sold it at Tarieh. All the members of the patrol swore that they had never approached the natron lakes. I went by train to Bir Houker, and when confronted with the tracks the members of the patrol had to confess that they had stolen the natron. This did not, however, prevent the guide, when he was interrogated by the President of the Court-martial, from denying that he had gone to the natron lakes.

THE PRUSSIAN SYSTEM OF HORSE BREEDING AND REMOUNTS

By COLONEL W. H. BIRKBECK, C.B., C.M.G.

To remark that the efficiency of an army largely depends upon its mobility, and that one of the most important factors in mobility is horse-flesh, is a blatant platitude ; but when we see the solemn warnings contained in the admirable reports of the Royal Commission on Horse Breeding pass year after year unheeded, and as we watch with despair the diminution in the supply of saddle-horses in England, it almost seems as though, platitudes or not, the remark is not superfluous.

In these days of international competition, organisation spells success in war as well as in business. It is to the preparation or organisation by Von Roon and Moltke of her national resources for war that Prussia owes her position in Europe to-day, and the modern German Empire its existence.

For models of organisation therefore it is to Germany that others not unnaturally turn, and a brief study of the system by which the German Government supplies horses for what is the most numerous and probably the best mounted Cavalry in the world will not be without interest.

GENERAL ORGANISATION OF THE PRUSSIAN STUDS

The year 1786 saw the foundation of the Prussian Studs by King Frederick William II., who appointed his Master of the Horse—Baron Lindenau—to devise some organisation by which his Cavalry should be mounted on home-bred horses instead of depending upon expensive and precarious supplies from abroad.

The organisation then established is still maintained with the exception of the transfer in 1848 of the horse-breeding establishments to the Department of Agriculture.

Two departments of the State are thus concerned :—

1. The Agricultural Department, which deals with horse breeding and administers two classes of stud establishments—i.e. *Chief Studs*, to breed sires for service in the country ; and *District Studs*, or Stallion Depôts, where these sires are kept.

2. The War Department, which is concerned merely with the purchase of remounts, and their accommodation in Remount Depôts till they join the units to which they are allotted.

The connecting link is a Royal Commission whereon the Stud Department, the Remount Department, and Civilian Breeders are all represented.

Prussia, Bavaria, Saxony, and Wurtemberg all have their own establishments, but those of Prussia are of course the most important, and they alone are here dealt with.

CHIEF STUDS

The Prussian Chief Studs are five in number :—

	Establishment		
Trakehnen	15	stallions and	350 mares.
Graditz	10	„ „	190 „
Beberbeck	5	„ „	100 „
Georgenburg *	5	„ „	70 „
Neustadt *	3	„ „	50 „

* Till recently mere Stallion Depôts, but now Chief Studs as well.

Founded in 1732 as a Royal Stable, Trakehnen in East Prussia, close to the Russian Frontier, is the oldest, the most important, and the best known of the Prussian Studs, and it is from East Prussia that the best of the Cavalry remounts come.

Graditz, near Torgau, on the Elbe, was established as a Royal Saxon Stud in the seventeenth century, passing to Prussia in 1815 ; it contains mostly thoroughbred English stock, and is under the personal supervision of H.E. Count Lehndorff, the Chief of the Stud Department.

PRUSSIAN SYSTEM OF HORSE BREEDING 163

Beberbeck, in Hesse-Nassau, is of more recent date, and was created to replace the older stud of Neustadt, in Brandenburg. A recent development has been the introduction of heavy cart-horse breeds to meet the demands of agriculture.

DISTRICT STUDS AND REMOUNT DEPÔTS

The District Studs, or Stallion Depôts, number eighteen, and contain about 3000 stallions, which are distributed throughout the country during the covering season for service at a nominal fee, varying from 5s. to £20 in the case of some of the thoroughbred horses. The strength of these Studs varies from 120 to 275 stallions, and, with the exception of Georgenburg and Neustadt, which are chief studs as well, they contain no mares.

Of Remount Depôts there are eighteen, with a capacity varying from 150 to 1000, and containing in all 8600 remounts.

COST OF STUDS AND REMOUNT DEPÔTS

The Budget for the Prussian horse-breeding establishments in 1904, the latest figures available, shows the following expenditure :—

	Expenditure	Receipts
Chief Studs	£101,689	£ 49,285
District Studs	167,550	112,205
Total	£269,239	£161,490
	161,490	
Total Expenditure . .	£107,749	

The Prussian Government thus provides breeders and farmers with 3000 stallions, placed for service throughout the country at a nominal fee, for a cost per head per annum to the State of £35.

The cost of the Remount Depôts is shown in a more recent Return (1907) to be :—

Expenditure	£417,852
Receipts	275,824
Balance	£142,028

thus working out to an annual cost of £16 10s. per horse, exclusive of the purchase price.

In comparison with the results obtained, and the benefits conferred upon the agricultural industry, the expenditure on the horse-breeding establishments is extraordinarily small.

DESCRIPTION OF THE CHIEF STUD AT TRAKEHNEN

The fact is that the studs are largely self-supporting, as the following detailed description of Trakehnen will show :—

The establishment covers a tract of flat country 10,650 acres in extent, divided up into twelve farms.

The soil is chiefly clay, though with patches of sand ; half the acreage is under cultivation, the remainder is pasture. The climate is healthy, but severe ; winter lasts practically for eight months in the year, when north and east winds prevail, though little snow falls, and the stock is hardy and strong in consequence.

Except for a Government grant of £20,000 a year, the concern is self-supporting ; besides the horses, there are 600 head of cattle on the farms, which include all the appurtenances of a well-found agricultural estate, a windmill, cart works, carpenters' shops, a sawmill, smithies, a school, a museum of hippology, a laboratory, and an hotel.

The employé's number 900, while the population dependent on the stud totals 2500.

The whole is presided over by a Director, Herr von Oettingen, whose courtesy and kindness to foreign visitors is proverbial, and to whom I am indebted for the photographs of some of his favourite sires which illustrate this article, and his staff includes a chief veterinary surgeon, a bailiff, or 'director of farm lands,' and an accountant ; each farm has a head man, usually a retired Cavalry or Artillery N.C.O., with eight to twenty lads under him.

Of the twelve farms five are breeding farms, apportioned as follows :—

Trakehnen, about ninety mares—best bred, lightest horses, mixed colours.

Bajohrgallen, about seventy mares—big saddle-horses, mixed colours.

Gurdssen, about 100 mares—big riding and draught horses, black.

Danzkemen, about eighty mares—big riding and draught horses, brown and bay.

Jonasthal, about sixty mares—big riding and draught horses, chestnuts.

Of the seven remaining farms, the four Eastern are occupied by fillies, and the three Western by colts classified according to their ages.

Of the sixteen stallions, six are thoroughbreds of English, French, and Hungarian strains.

Many of the thoroughbred mares are German bred, but there are no thoroughbred German stallions, and, at the present time, no Arab stallions among the Trakehnen sires.

Each stallion serves twenty to fifty mares during the season, including a few farmers' mares at a nominal fee.

The typical 'State' or distribution of the Trakehnen stock in spring will repay careful examination (p. 166).

Foals remain with their dams for from four and a-half to six months, mares and foals being kept together in small herds, grazing by day, and at night loose in big sheds fetlock deep in straw.

At two months foals get a small quantity of oats, which is gradually increased, and at six months, or before if well grown, they are taken from their dams and herded, colts and fillies mixed, twenty or forty together in a big shed.

They get two hours' exercise twice daily, in winter driven round a roofed enclosure, and in summer in the fields.

At two years old colts and fillies are separated, broken to saddle, and put in training for a year.

At three years old the colts, to the number of sixty or seventy, are shown to a Commission, consisting of H.E. Count Lehndorff, the Chief of the Stud Department, the President of one of the Remount Purchasing Commissions, two Directors of Studs, and a private breeder; about fifty are selected and sent to the District Studs, where they are kept in training for a second year, and run in special stallion races, before commencing to serve at four years old.

The rejected three-year-old colts are castrated at once.

Of the three-year-old fillies about a dozen are picked out as likely to breed racing stock, and, after a second year in training,

REPORT ON THE STOCK OF HORSES AT THE ROYAL CHIEF STUD FARM AT TRAKEHNEN,
MAY 1, 1906

The Stock at Trakehnen consists of:

Name of the Stud Farm and Paddock	Stallions		Mares		Young Stallions							Young Mares							Saddle and Farm Horses	—
	According to the Budget	Actually	According to the Budget	Actually	Born in							Born in								
					Increase in Foals, 1906							Increase in Foals, 1906								
					1901	1902	1903	1904	1	2	3	4	1901	1902	1903	1904	1	2			3	4
Trakehnen	15	16	80	89	13	25	16	28	26	11	15	22	25	40	600					
Bejohrgallen	—	—	60	65	13	21	20	20	24	15	15	15	22	25	265					
Gurdsen	—	—	90	98	14	80	30	32	38	20	29	26	26	40	378					
Danzkehmen	—	—	70	69	17	20	26	16	24	10	14	17	19	25	257					
Jonasthal	—	—	60	66	3	17	12	16	18	3	19	19	11	22	206					
From farm-mares	—	—	—	—	—	—	—	8	—	—	1	2	—	3	9					
Total	15	16	350	382	60	113	104	115	130	59	93	101	103	155	1705					
The foregoing stock is distributed as follows :—																				
Trakehnen (old paddock)	7	88	—	—	26	60	1	—	26	2	3	—	—	41	46	214				
Trakehnen (new paddock)	—	—	8	—	—	—	4	—	—	40	4	—	—	2	18	162				
Bejohrgallen	2	64	2	1	—	1	—	—	24	1	9	—	—	25	24	162				
Gurdsen	3	92	4	—	—	—	—	—	88	6	12	—	—	40	83	238				
Danzkehmen	2	64	2	—	—	—	—	—	24	1	7	—	—	25	26	151				
Jonasthal	2	65	1	1	—	1	—	—	18	—	8	5	59	22	21	138				
Kalpakin	—	1	2	—	—	—	—	—	—	8	5	5	88	—	17	130				
Burgdorfshof	—	—	—	—	—	—	—	—	—	—	5	—	65	—	8	78				
Birkenwalde	—	—	2	—	—	—	—	—	—	1	38	42	—	—	12	95				
Tankenischken	—	—	2	—	—	—	37	—	—	—	2	—	—	—	12	53				
Guddin	—	—	15	—	42	23	23	—	—	—	—	—	—	—	13	93				
Jodslanken	—	—	2	—	4	4	40	—	—	—	—	—	—	—	12	68				
Mattischkehmen	—	—	2	—	4	4	—	115	—	—	—	—	—	—	82	153				
Total	16	382	60	113	104	115	130	59	93	101	103	155	274	1705						

run in the half-bred races at Königsberg and Insterberg ; the next best forty are ridden and broken to harness for a second year, and covered as four-year-olds.

Barren mares are used for farm work, but mares in foal do little or nothing. Of the colts and fillies not selected for the stud, the Royal Stables takes its pick in the spring, and after the stud officials have selected what they want for farm work, the remainder are then sold by auction.

That the quality of the stock depends on the soil and climate is an axiom in horse-breeding, and that East Prussia is inferior to the British Isles as a horse-raising country is shown by the gradual deterioration of the imported stock, and the consequent necessity of constantly putting in fresh imported blood to maintain the standard of undoubted excellence of the Prussian Cavalry remount.

DETAILS OF DISTRICT STUDS

Of the District Studs little need be said ; they are establishments run on the same lines as above described except for the absence of mares and young stock. During the covering season the sires are distributed in batches throughout the district, and on its conclusion come back to the stud to be cared for and exercised till their services are again required.

The Director of each stud is charged with the organisation of Horse Shows for brood-mares, colts, and fillies in his district.

PURCHASE OF REMOUNTS FOR THE ARMY

The effective organisation of the Prussian Remount Department dates equally with that of the Stud Department from 1786, but it was not till 1828 that the kingdom was able entirely to supply the wants of the army, and purchases could therefore be confined to the home markets.

Remounts are now bought by Commissions, of which there are five in Prussia ; each includes a staff officer or senior captain,

two lieutenants of Mounted Corps, a veterinary officer, and an accountant. These Commissions tour their districts in spring and summer, buying privately from owners and in the markets and fairs, and sending their purchases direct to the Remount Depôts.

Horses are bought at three years old at an average cost of £45, spend one year at a depôt, at an average cost of £15, join their regiments in the following July, i.e., at four and a-half years, and after a training lasting one and a-half years enter the ranks of their squadrons well developed, well-balanced six-year-old horses, capable of ten years' hard work. The finished article is expensive, but it is the best that careful organisation can supply, and who can say the money is not well spent.

DESCRIPTION OF THE REMOUNT DEPÔT OF KATTENAU

Within a few miles of Trakehnen is the Remount Depôt of Kattenau, founded in 1827 and typical of such establishments in Prussia.

In May 1905 the depôt, including the outlying farms of Old and New Kattenau, and Old and New Budepoenen, was organised as follows :—

<i>A. Area.</i>	<i>Acres.</i>
1. Fields	1,201·67
2. Gardens	5·63
3. Hay meadows	459·30
4. Pasture meadows	67·53
5. Woods and dwellings	16·42
6. Paddock and buildings	70·31
Total area	1820·86

B. Remounts and Live-stock.

1. Remounts purchased in 1904	704	} 1,100
2. Remounts purchased in 1905	396	
3. Foals	26	
4. Farm-horses	120	
5. Hired horses	9	
6. Draught-oxen	50	
7. Bulls	4	
8. Cows	110	

C. *Personnel.*

1 Administrator.	6 Custodians.
1 Secretary.	4 Artificers.
2 Management inspectors.	34 Remount attendants.
1 Veterinary officer.	31 Farm-horse attendants.
4 Forage superintendents.	40 Servants and day labourers.
2 Instructors.	7 Timekeepers and night watchmen.

The management of the farms aims primarily at providing the forage required to feed the horses, and specially green food for consumption in summer, while incidentally the sale of other produce, live-stock, &c., goes to reduce the cost of the establishment.

The horses are kept loose in large airy sheds, about twenty in each, with a sandy paddock attached, in which is a water-trough.

The horses are not ridden or broken in any way, but are very quiet and easily handled: they are exercised by being kept on the move in their paddocks, or turned out to graze during the day in summer. They are not shod, but their feet are rasped every month.

The usual daily ration is 6 lb. of oats, 10 lb. of hay, and 12 lb. of straw per horse, and in summer green food preponderates.

The remounts are apportioned to units in May or June, and parties are sent to fetch them in July.

So much for the provision of horses in peace; preparation for war is not neglected.

CONSCRIPTION OF HORSES ON MOBILISATION

By the Law of 1886 for the conscription of horses, a general census of horses is made every ten years by the civil authorities; and this is followed by a classification made by Commissions composed of one military and one civil official.

Districts are then assigned to the different Army Corps, and in case of mobilisation the corps commander calls for the required number of animals of various classes.

Civil Commissions established in peace, composed of three

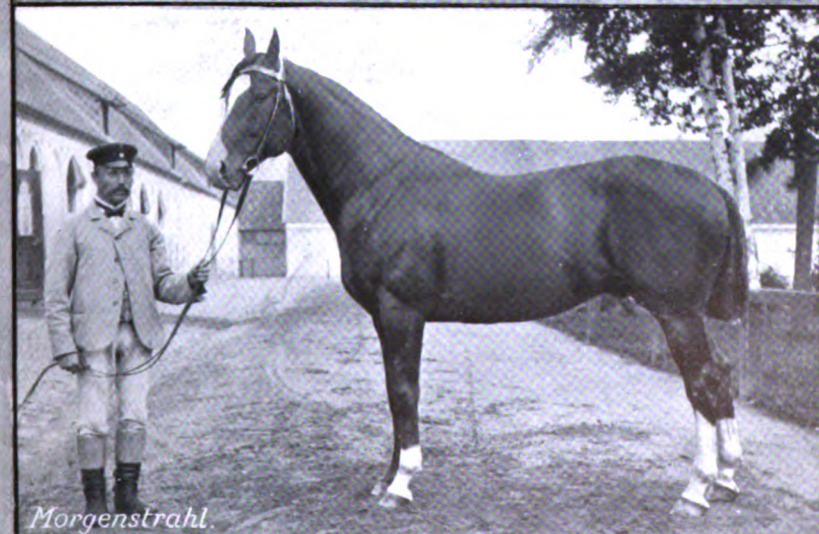
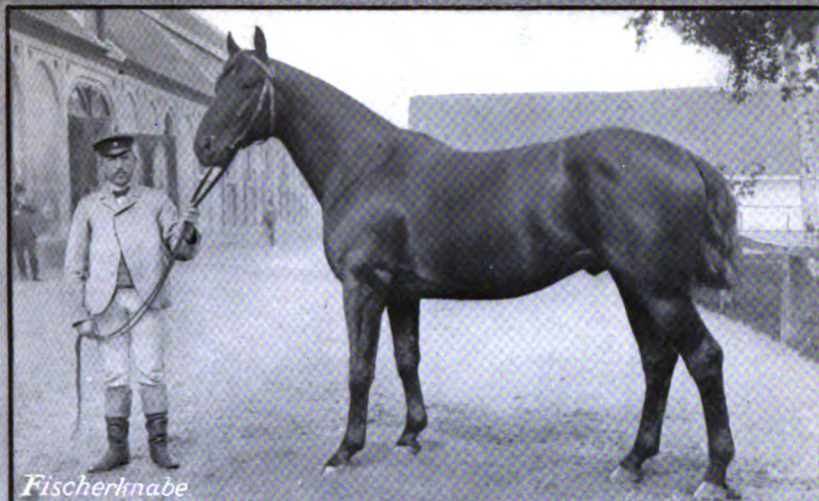
members, and so arranged as to be charged with the examination of not more than 1,200 horses, then select the animals and have them sent to designated points, where military receiving commissions take them over and price them, and send them to units in charge of reservists assembled for the purpose.

CONCLUSION

The essential characteristics of a war-horse are blood, bone, substance, and docility ; by methodical organisation and judicious direction of her equine resources Germany's agricultural ministers have provided her army with an abundance of the right material both for peace and war, and that the army makes good use of it, no one who has recently seen the German Cavalry will deny.

NOTES ON ILLUSTRATIONS.

1. FISCHERKNABE.—Chestnut, half-bred 3 years old colt by Obelisk out of Fischerin, by Blue Blood ; foaled at Trakehnen 1901.
2. POLARSTURM.—Half-bred black stallion, 7 years old, by Optimus out of Povona by Hartenfels.
3. MORGENSTRAHL.—Half-bred chestnut stallion, 11 years, by Blue Blood out of Moka by Lollypop ; foaled at Trakehnen 1896. Blue Blood by King Tom out of Marigold was presented to H.I.M. The Kaiser by Lord Lonsdale.
4. Bronze model of Morgenstrahl at 4 years old after winning the race for half-bred colts at Insterberg in 1900.





TRAINING OF YEOMANRY AS DIVISIONAL CAVALRY

By A YEOMANRY OFFICER

IN a previous article (CAVALRY JOURNAL, October 1908) I ventured to offer some suggestions for the training of the units of the new Mounted Brigades, which would on mobilization form part of those Brigades. In the present article I propose to consider the training of those regiments which, though now attached to the Mounted Brigades in peace time for the sake of convenience, would not be so attached on mobilization.

There are fourteen of these regiments—namely, one to each of the Territorial Infantry Divisions. As Divisional Cavalry they will be under the direct orders of the General Officer commanding the Division to which they are attached. Their duties will be to :—

(1) Supply patrols in connection with the advanced, flank, and rear guards, and also with the outposts, thus assisting the Infantry in the *immediate* protection of the Divisions ;

(2) Maintain connection by means of despatch riders with the protective Cavalry and neighbouring Divisions ; and

(3) Furnish orderlies, escorts to guns, convoy and baggage guards, &c.

These duties compared with those of protective Cavalry—the *rôle* generally assigned to the Mounted Brigades—entail to a much greater extent the breaking up of squadrons and even troops, and the consequent complete independence of very small detachments requires a special standard of individual knowledge and of individual efficiency.

It is therefore suggested that the training of Divisional regiments should be carried out on lines somewhat different from those of regiments which form part of Brigades.

The question of the number of squadrons necessary to the efficiency of an Infantry Division has been much discussed.

Our Regular Divisions of all arms are provided with two companies of Mounted Infantry.

The French Divisions (two to each Army Corps) have one Divisional squadron only.

In Germany nothing definite is laid down, though the recent Field Service Regulations indicate that *at least one squadron* should be left to each Division.

The Japanese, taught on German lines, have allotted a regiment of three squadrons to each Division ; but in Manchuria it was the invariable custom, when Divisions were grouped in armies, to leave them only one squadron each and send the remainder to strengthen the independent Cavalry.

It is unsafe, then, to assume that the squadrons of Divisional regiments will never be called upon to work together as a regiment or even as a unit of a Brigade, and the tactical training of the squadron as a unit must, therefore, never be neglected in the desire for efficiency in the special duties which Divisional Cavalry in smaller bodies are called on to perform.

In Divisional Cavalry work responsibility will devolve largely on junior officers, N.C.O.s, and even on private soldiers, and it is only by careful individual instruction, both theoretical and practical, throughout the year that the required standard can be attained.

The points I would venture to suggest are the following :—

(a) *Horsemastership* :—

Generals and Staff Officers require orderlies, who will be detailed permanently and attached to the Divisional or Brigade Headquarters.

Moreover, every Infantry detachment requires some mounted men to play dog to the blind man.

Small groups of Yeomanry will therefore be constantly and permanently detached from their squadrons, and that they should be well able to look after their own horses is essential to their efficiency ; every man must therefore have the practical knowledge of a good civilian groom.

(b) *Knowledge of the organisation of the Division to which the regiment is attached :—*

An intelligent orderly must be familiar with the appearance and names of every Commander and Staff Officer in the Division, and with the names and distinctive badges of every unit. He must further know the space the Division occupies on the road, in bivouac, or billets, and how to ascertain the location of each unit, for it makes a vast difference to an orderly whether he looks for a particular officer at the head or tail of a 15-mile column, or at the wrong end of a long line of villages.

(c) *Knowledge of the protective formations of the Division on the march and at rest :—*

Divisional Cavalry supply the outpost mounted troops, and the mounted troops of advanced, rear, and flank guards, and must know the formations and mode of action of the troops with whom they are working.

(d) *Protective, tactical, and topographical reconnaissance :—*

By protective reconnaissance I mean patrolling in connection with outposts, advanced, flank, and rear guards.

By tactical reconnaissance I mean reconnaissance on the battlefield, which entails an intelligent knowledge of general tactics and of the course of the battle.

By topographical reconnaissance I mean rapid reports on roads, estimates of accommodation in villages, water, supplies, &c.

(e) *Despatch riding, as distinct from mere orderly duty :—*

This means the maintenance of communication with other Divisions and with the protective Cavalry, and involves not only map-reading and horsemastership, but often scoutcraft in its highest sense, to carry a message safely through country over-run by an enemy.

(f) *The duties of escorts to guns, convoys, and transport columns, as well as to Staff and other officers carrying out tactical reconnaissances of an enemy's position.*

Obviously Divisional Cavalry have a great deal to learn outside purely squadron and regimental matters, and it lies with the squadron officers to teach them these duties by means of lectures, war games, and exercises in the country and on the sand table, *before* the regiment assembles for permanent duty, when collective tactical training will fill every available hour.

Finally, it is of great importance to everyone concerned that during at least a portion of permanent duty the regiment should take its place in the Division of which it forms part, and actually perform the work it will be called upon to do in war.

In this connection it is interesting to note the final decision of Germany, that three years' continuous training is the minimum period necessary to make an efficient Cavalry soldier.—EDITOR.

A PAPERCHASE IN INDIA

By LIEUT. A. P. HENEAGE, *R.H.A.*

THE following account of a paperchase, which took place in Rawul-Pindi in September 1907, may be of interest to officers who wish to amuse their men during the hot weather.

The object of the paperchase was to test individual intelligence and horsemastership.

GENERAL IDEA

‘Two spies have escaped from Rawul-Pindi Fort with plans, &c., and were last seen galloping away at the point marked with a red cross on the attached map.’

SPECIAL IDEA

‘J Battery R.H.A., as Mounted Rifles, will turn out to pursue and capture the spies. The 10th Hussars (imaginary), who are camped on the Sohan River, have had news by helio and are spreading out along the river bank to stop the spies if they attempt to cross.’

‘The paper trail starts at the point marked with a cross in the map. When the spies are discovered the plans will be found buried, twenty yards North-West of the place the spies are found in.’

The following rules were drawn up :—

(1) This competition is open to teams each consisting of ten N.C.O.s or men.

(2) Points will be awarded as follows :—

(a) For each man who arrives at the place where the plans are buried, 1 point.

(b) For the man who first discovers the plans, 2 points.

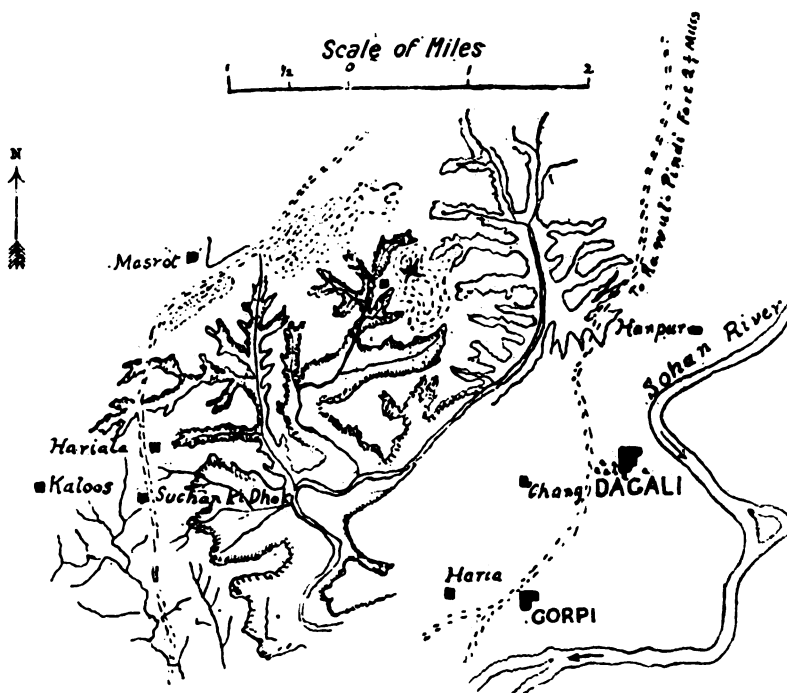
The team with the most points wins.

(3) Any horse showing signs of distress disqualifies the rider.

(4) Two prizes are offered :—

- (a) For the man who first finds the plans.
- (b) For the winning team.

Six teams (one from each sub-section) competed. Two officers acted as the spies. The competitors were led by the Officer Commanding to within two miles of the start and 'let go.' The course laid was nearly four miles long, and was over and round a number of nullahs, difficult country to cross, with



several awkward ascents and descents which necessitated the men dismounting.

Several false trails were laid, and these proved fatal to many aspiring pursuers.

After some careful tracking the pursuers came upon two horses in a tope of trees. The men were ignorant of the identity of the spies and as to how they were dressed. Since the trail was pretty thick round a certain village, the village elders, who were seated in a circle, were closely questioned.

These elders, entering into the spirit of the game, stoutly denied the existence of any 'sahibs.' However, some man brighter than the rest pushed back some of the blankets which natives carry over their heads in the morning. The 'sahibs' were then discovered in Indian kit.

The men who discovered them kept their knowledge to themselves and at once proceeded to look for the plans. Several men were heard to wonder 'where those blokes could be anyhow' while all the time the latter were sitting in the open within a few feet of their trackers. It was amusing to watch the secrecy with which the men who had discovered the spies got out their compasses to find the North-West. In most cases they were much too excited to allow the needle to settle.

Of the sixty N.C.O.s and men who started, about thirty arrived at the finish.

Only one team succeeded in arriving with all its members complete. One complete team failed to find the start. They were deceived by the idea of the Sohan River being guarded by the 10th Hussars. This information was intended to show that the spies would not try to cross the river, which is full of quicksands and it was advisable to keep the men away from it.

The starting point of the trail was unknown to any of the men, who had only their maps to guide them. Many fell victims to the false trails and no doubt had a great deal of quiet fun while trying to get out of the nullahs they found themselves in. Of the thirty horses who had arrived at the finish not one was found to be in any way distressed, and the remainder, when they eventually got back to barracks, were found unhurt and in excellent condition. This was no doubt partly owing to the fact that the trail was laid very thinly and 'soon brought hounds to their noses.'

The 'trail,' of course, consisted of cut up office paper, and was laid on in splashes from ten to thirty yards apart. It can easily be laid at a fast canter. The false trails were always laid thicker than the real trail and placed conspicuously, so as to catch the eye of the unwary.

***SOME NOTES, SOME NOTIONS, AND A TACKLE
FOR THE EARLY HANDLING OF TROUBLE-
SOME AUSTRALIAN REMOUNTS***

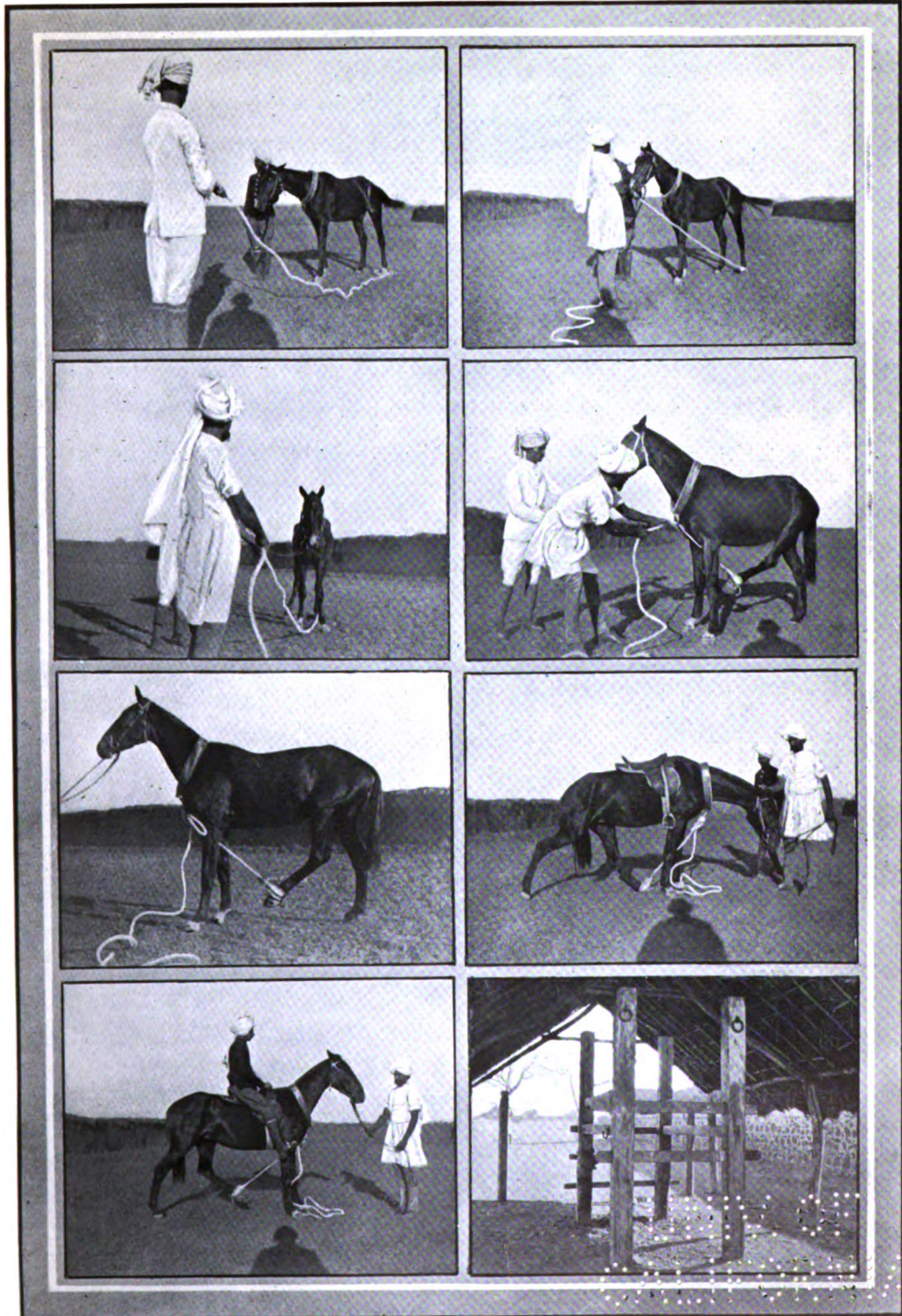
By CAPTAIN R. W. W. GRIMSHAW, *Prince Albert Victor's
Own Poona Horse*

Arrangements for the reception of waler remounts—The progressive training of the waler—Tackle for use in breaking remounts.

FOUR and a half years' experience in the training of some 350 waler remounts for our Native Cavalry from the time they were deposited on the platform of an up-country station till they were handed over some eight or nine months later to their respective squadrons, has suggested to me that perhaps the more important and striking points that came under my observation during those years might be considered worth perusal.

Arrangements must be made for segregating remounts on arrival. Either a good-sized paddock or some loose boxes should be prepared; head and heel ropes must be rigidly avoided. I prefer loose boxes to the paddocks, as with so little time at one's disposal, each animal should, on arrival, commence receiving that personal attention which is so essential.

Let us assume that the animal will have to be segregated for fourteen days. He must be suitably dieted, and during this time must be briskly hand-led every morning and evening for half an hour or so; the syces and men in attendance must be instructed to show no hastiness; all violent tugging at the lead rope which is supplied in the stables should be rigidly put down, no matter how impossible the animal may be. Very often the apparently most 'impossible' comes to hand much more quickly than his more docile brothers, and until one is convinced that one has to deal with a very nervous or very vicious ill-tempered



TRAINING OF AUSTRALIAN REMOUNTS.

TO THE
MUSEUM

brute, kindness to all should be the order of the day. I am convinced many young 'bounders' (as the importers call them) are ruined for life by unnecessary harsh treatment and injudicious hustling during their first few days after arrival.

During the period of isolation the syces should be instructed to make friends with their charges from the moment they arrive. In two days' time the average animal will allow the attendant to handle his head, neck, back, and flanks, and in five or six days allow the brush to be lightly used. If the weather is cold it is obviously desirable to entice the animal to carry a rug, and I have found the following as quick a plan as any other. Take an ordinary blanket and fold it so that you can unfold without having to drag at it when it is placed folded on the animal's back. By laying this folded blanket on the animal's back two or three times a day and leaving it there, on the second day you can turn, or pull down, one or more of the folds, and on the third get the whole blanket on. As a substitute for the folded blanket a numnah makes an excellent preliminary article, but one cannot extend its covering area, as with the folded blanket.

Thus, during the first week, the animal of average temperament will allow the syce to handle him partially and lightly apply a brush, and will submit to be blanketed. During the second week efforts must be made to extend the handling and grooming and also to bit him, perhaps, if very docile, saddle him in the stall, and apply the collar of the tackle, which will be described hereafter. We will deal with the biting first.

Firstly, take a light headstall, see that all the buckles, &c., work easily, and that those which attach it to the snaffle are open; show it to the animal with a piece of lucerne, and let him smell it, rub it lightly along his face, working it up to his forehead and ears. By a little manipulation the syce can work it over his ears, especially if someone holds a piece of lucerne low down and entices the animal to lower his head. Now comes the snaffle. Any snaffle will do, but the lighter the better for this purpose, and avoid big ringed ones, as the

latter often make rather an alarming noise. Make much of your pupil, and then quietly buckle the snaffle on to one side, care being taken that as it hangs down it is not allowed to flap against the animal's mouth ; now take a small piece of bushy lucerne, push it through the centre joint of snaffle and offer the *tout ensemble* to your pupil. In seven out of ten cases he will take it into his mouth, and give you time while he fiddles with the morsel of lucerne to buckle the other ring of the snaffle to the head-stall. Leave it on for an hour or so, then repeat the process. In three days' time the average animal will make little difficulty about bridling. Efforts may then be made to replace the blanket by the jhoul, and even to place the saddle on the back and girth gently, and to adjust the tackle-collar round the neck. Thus by the end of the first fortnight most of one's pupils ought to allow themselves to be jhouled, bridled, and lightly brushed as far down as the elbows and stifle. Some will permit a saddle being fastened on and the tackle-collar placed round their neck. At the end of the first week one ought to be able to discern those animals for whom the words kindness and patience are apparently unknown quantities. Still, I advocate another week's effort before resorting to that final arbiter, 'force.'

Every regiment or unit which has a lot of raw walers to deal with should provide itself with a 'crush,' as shown in the photograph. All crushes must be very strong, and the arrangements for opening and closing the entrance and exit must be of the very simplest. There must be no padding, unless you can ensure that under no circumstances can it get burst or cut about, or the nails which secure it become bared ; take care that the slip-in bar, which closes the entrance behind the animal, is not too high up (about 42 inches)—in fact, it is better to have one or two more bars beneath it (see photo), to prevent the animal, when approached from the front, crouching down and getting his rump under it.

If a horse is not inclined to go into the crush, the best arrangement is to get three or four steady animals, and, having

removed the closing bars, let them file through, when by a little manipulation you can generally persuade the unwilling one to follow ; as he enters the crush, station a man at the side of the entrance and exit with the closing bars, with their ends in the slide sockets ready to be pushed across, with orders to shove them 'home' on your word of command. Needless to say, the syce must lead the animal in, and it is as well to have an extra piece of rope attached to the lead to enable the syce to get well clear of the crush before the animal is secured.

Having got your pupil caged, you want to bridle and handle him. To carry out the former, pass the lead rope round one of the closing bars and pull his head close to it, induce the animal to allow his head to come close by offering lucerne or carrots, and make sure you have his head secure. Now put on head-stall, as before, leaving the snaffle hanging. This will often be met by a perfect paroxysm of struggling, but you are complete master and can do what you like. The next point is the snaffle. Many animals keep their teeth tightly clenched, in spite of all offers of dainties, &c., and by no methods short of cruel ones can you force open their jaws ; therefore, let me recommend a snaffle with smallish light rings, like the ordinary bridoon. Tie a piece of stout twine to the free end of the snaffle and attach it to a cane about a couple of feet long, push the cane through horse's mouth over the bars, and then by means of the string draw the snaffle through after it and attach it to head-piece. Before releasing the horse from the crush handle him all over. An hour's handling, three times a day, for three or four days, generally convinces the animal that he is powerless. A great deal of all this bother is caused by intense nervousness, and after a very short time the animal learns that nothing terrible occurs to it in the crush, and soon settles down.

The next step, that is the third week, is saddling and mounting. Some animals quietly submit to saddling in their standings ; a batch of forty or fifty may generally be classified as follows :

(1) Those that submit without any fuss to saddling during the first fortnight.

(2) Those who will only allow the numnah, and perhaps the tackle-collar being placed round their neck.

(3) Those that are so intractable as to require treatment in the crush.

The latter are entirely at your mercy, they may be saddled at any time when in the crush; but I am opposed to taking them out of it saddled, as they often indulge in a great deal of wild bucking and breaking loose, which is opposed to the principle of showing them you are master from the commencement.

I prefer to leave saddling for the present, contenting myself with gaining a complete mastery in bridling and general handling. You can, however, place the tackle-collar on with advantage, and let the animal return to his standing wearing it.

An objection to saddling in the crush is the difficulty of 'girthing up,' as it is not always easy to get at the straps without fiddling between the bars—a by no means safe undertaking with a restive animal.

Now to come to the tackle, the collar of which has been more than once alluded to. Its use was shown me by an Australian importer. It is simple, inexpensive, and in my opinion invaluable. By its use you ensure that absolute mastery which is so essential with this class of animal, and you minimise any chance of injury both to the animal and to any of those whose lot it is to saddle or mount him.

It consists of a strong leather collar about 3 inches broad, lined with thick numnah, in length about that of the ordinary driving collar (not breast pattern); it should be so made that it can be fastened and opened with the greatest of ease. I have found that two strong steel round-headed studs, firmly fixed into it as at A and B (see fig. 1), over which the tongue c could be easily pressed home, was the best and most efficacious. A large buckle at D, with one tongue to it, is useful for securing

the strap *E*, and prevents any chance of the collar getting opened by the tongue *c* slipping off the studs. At the opposite side of the collar to its opening a very powerful steel ring must be attached very firmly by powerful rivets and stitching. Next a strong, soft, well-stretched cotton rope about 1 inch in diameter and 15 feet in length is necessary.

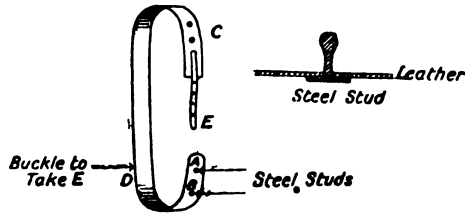


FIG. 1.—COLLAR

To one end of this must be fastened a powerful steel ring *z* (see fig. 2), big enough for the rope to run easily in. For some inches back along the rope from the ring must be sewn a piece of leather about 2 inches broad and lined with numnah as at *x*;

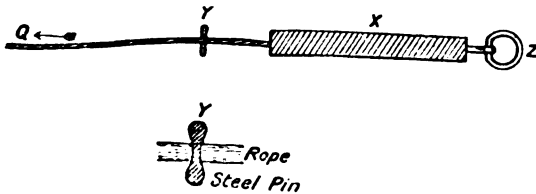


FIG. 2.—ROPE, RING, PIN, &C.

the length of this strip of leather must be such that it will easily encircle the normal pastern (12 inches). At the point *y*, about $1\frac{1}{2}$ inches from where the leather ends,

a stout steel pin about $2\frac{1}{2}$ inches, with well rounded ends, should be forced through the rope, carefully fastened, and then stoutly lashed. The pin must be distant from the steel ring so that, when the end *q* (fig. 3) is passed through the ring *z* and pulled till the pin is caught against the ring, the circle so enclosed is slightly smaller than the base circumference of the normal hoof.

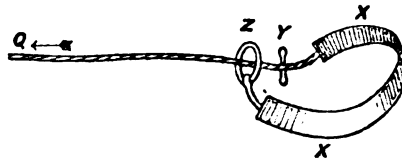


FIG. 3.—ROPE ADJUSTED FOR USE

When the collar has been put on, lay the rope in the litter with the end *q* through the ring *z*, and so pulled till a loop about 18 inches in diameter is left. Walk the animal round till one of his hind feet passes over the loop, when halt him; a little manipulation of the head will get him to

plant the hoof right in the centre of the loop. When either of the feet is so placed, an assistant must jerk the rope smartly, which will pull the ring *z* down on the iron pin *y*, enclosing the fetlock. The holder of the rope must stick to his 'end' otherwise the animal will shake himself clear. Some lucerne should then be given. If the animal will not go near the rope on the ground, cover it up with litter, just leaving the end clear. The next step is to pass the end of the rope between the fore legs and through the ring of the collar. If you do this directly, you must place the rope along the ground close to the fore legs and force him to passage to one side till he gets his fore legs astride the rope. A little mild threatening on one flank will attain this, then gently raise the rope, gripping it firmly, and approach the animal, when by gentling and lucerne he will generally allow you to pass the rope through the ring of collar; having done this you must gently but firmly raise the hind foot some 10 inches off the ground, and the rope must be firmly fastened to the ring.* This does *not* produce any violent struggling; why I cannot say, as nearly every other new movement with a timid waler causes a perfect storm of struggling and opposition. When the animal's foot is raised and fastened he will stand still; if urged into moving a few halting steps by threatening him with voice and whip, he may struggle a little, but only a very little, and will again stand still. Now saddle him, pulling the girths tight by degrees, and then mount him. As soon as he feels the weight on his back, he will at once commence to struggle, often lying down. On no account must

* Since going to press we have received from Captain Grimshaw the following simple improvement in the tackle which obviates the necessity of tying a knot:—Between *y* and *q* (fig. 2), and about 10 inches from *y*, the rope must be perforated by forcing into it five or six metal eyelets and securely fastening them 3 inches apart. After passing the end of the rope through the ring of the collar, slip it through a wooden runner or stable log about $3\frac{1}{2}$ inches in diameter, i.e. $\frac{1}{2}$ inch larger than the ring of the collar; having drawn the rope tight and raised the foot from the ground, the eyelet holes will appear through the log pressed against the ring, and into one of them can be dropped a stout split steel ring, thus quickly and firmly securing the rope.

the rider quit his back ; the animal can do him no harm as, owing to the leg being tied up, he cannot roll except very slowly, and there is plenty of time to get clear.

Having forced the animal to hobble about for a few paces till thoroughly fed up, undo the rope and gently let down the foot ; before doing so caution the rider firmly to grasp the front and back arch and stand by for a buck. On letting the foot down the rope will still encircle the pastern, and to knock it off a light stick about 5 feet long is necessary, in order to tap back the pin from the ring. Take care to do this gently, and it is well to have the syce at the animal's head with some lucerne, &c. Now let the animal move a few paces forward to clear itself of the tackle (the collar of course remains on), and then let the syce lead him round in a circle. I have rarely seen an animal buck if not flustered or scared by something. If he does, and dislodges the rider, he must be at once put back in the tackle and remounted till he ceases to give trouble. Before casting the animal loose, it is well to mount and dismount several times.

By the end of the fourth week you ought to have all your remounts mounted, and by the end of the fifth I recommend opening a first ride, into which go all animals that appear naturally well balanced and disposed, often 30 per cent. By degrees the remainder will again naturally subdivide themselves into (1) Those better balanced and disposed ; (2) Those that one might term clodhoppers, and ill-disposed ones.

This second subdivision will generally appear about the end of the second month. For (2) you must select your most active and expert riders, as only the most assiduous attention will get them ready for the following drill season.

Thus by the end of the second month you have three rides in various stages of advancement, chiefly of balance.

From now on the training must proceed on the lines more or less broadly defined by our excellent 'Cavalry Training,' and at the end of eight months your pupil should take his place in the ranks.

RUSSO-JAPANESE WAR.—III

By COLONEL W. H. BIRKBECK, C.B., C.M.G.

THE BATTLE OF MUKDEN

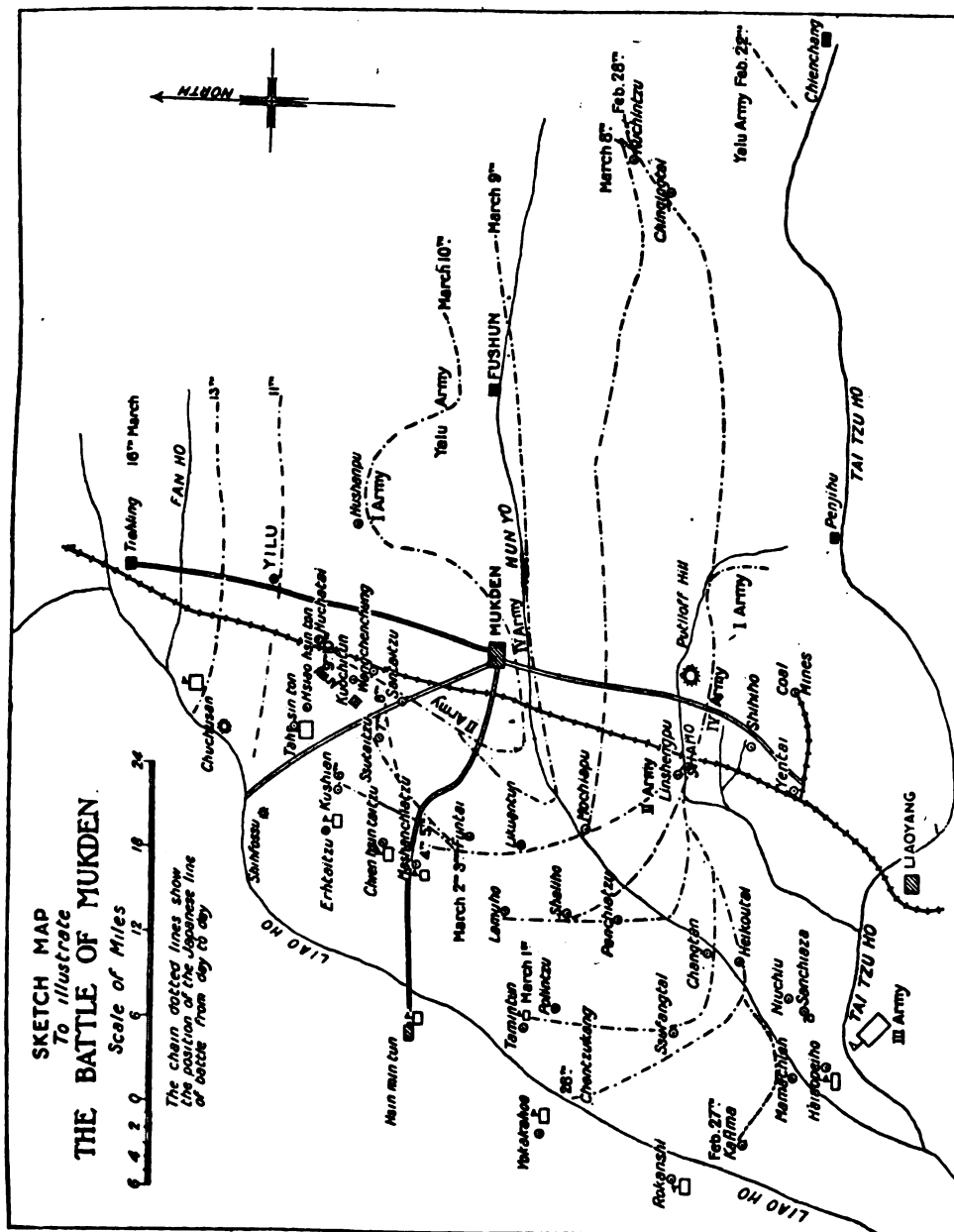
DURING the whole period from the battle of the Shaho in October 1904 till the commencement of the battle of Mukden in February 1905, the Russian and Japanese armies lay opposite each other in close touch all along their front, their lines of defence being at distances of from 200 to 1000 yards apart.

Constant skirmishing took place and the guns on one side or the other were hardly ever silent, but the only serious engagement was the battle of Heikoutai, briefly noted in the preceding article.

The middle of February, therefore, still saw the armies facing each other on the Shaho, but General Nogi's army, released by the capitulation of Port Arthur (January 2), was close at hand, and Oyama now had his full strength available and ready to strike the blow at his final objective—the enemies' Field Army—for which he had so long been waiting.

It will be remembered that from lack of force the Japanese victories at Liaoyang and on the Shaho had been followed up by no effective pursuit, and in his orders the Marshal impresses this fact upon his commanders, directing that a real effort must here be made to reap the full fruits of victory.

The general plan was simple enough: holding the enemy to his ground along the front, his right was to be turned and he was to be pushed off his line of communications—the railway—



into the broken hilly country east of it, where escape would be difficult.

The Third Army from Port Arthur was to make the turning movement, and that its presence upon the Japanese left should be carefully concealed till the last moment was essential, in order to give the operation that element of surprise upon which its success depended.

Oyama resorted to stratagem ; forming a Fifth Army, called the ' Yalu Army,' he sent it at Kouropatkin's left, disguised as Nogi's.

Taking the 11th division, one of the four divisions of the Port Arthur siege, he marched it round by the coast road, via Pitzewo and Takushan, to Feng-huang-cheng, where it joined the 1st Reserve Division, and under Kamamura crossed the hills and descended upon the right of the First Army at Chien-chang.

The front from Chien-chang to Hsiaopeiho is some eighty miles.

The Japanese armies then stood on February 22 as follows, from right to left, as shown by the dotted line of that date on the sketch.

Yalu Army (Kamamura) : 11th and 1st Reserve Divisions.

First Army (Kuroki) : 2nd, 12th, and Guard Divisions.

Fourth Army (Nodzu) : 10th and 6th Divisions, strengthened by 1st Artillery Brigade and some 11-in. howitzers from Port Arthur.

Second Army (Oku) : 4th, 5th, and 8th Divisions, and Akiyama's Cavalry Brigade.

Third Army (Nogi) : In rear of the left flank, 9th, 1st, and 7th Divisions, 2nd Artillery Brigade, and 2nd Cavalry Brigade.

General Reserve : 3rd Division, and three Reserve Brigades.

The total strength of fourteen divisions, with two Kobi brigades to each, was rather less than 350,000 fighting men, with 750 guns.

On the Russian side, the ranks had been filled during the

winter, and Kouropatkin had rather less than the Japanese total, something over 800,000 men, posted as follows :—

East of the railway—1st European Army Corps, 4th Siberian Corps.

Centre—On the railway, 17th Army Corps.

West of the railway—8th and 10th Army Corps, 2nd Siberian Corps.

In reserve, near Mukden—15th Army Corps.

Between the Hun and the Liao were Mischenko's Cavalry—Don, Ural, Caucasus, and Orenberg Cossack Divisions, a Dragoon Division, some Railway Guards, and some Mounted Infantry : but of these a large part had gone North to guard against the Raids of Naganuma's and Hasegawa's two squadrons on the communications.

Mischenko himself had been wounded at Heikoutai.

On the left flank was Rennenkampf's Independent Force, the Siberian and Trans-Baikal Cossack Divisions, and 7th Infantry Division, and this command appears to have been moving westwards with a view to the renewal of the offensive on the Russian right.

On February 28 the ball opened with the advance of the Yalu army on Fushun in two columns, supported by a forward movement of the right of the First Army.

Kouropatkin strengthened his left, and Kamamura's progress was stopped on the 28th at Chinpingtai and Kuchiatzu.

He had done his work, and the presence of troops from Port Arthur on this flank had been advertised with elaborate care.

'Out of the way, we've come from Port Arthur,' was constantly shouted in Russian by the usually silent Japanese whenever the lines were close enough, and in the pocket of every corpse that fell into Russian hands were letters addressed to the Port Arthur Army.

There was no doubt in Kouropatkin's mind that his left had Nogi in front of it, and, though the reserve did not actually move, Rennenkampf appears to have returned to that flank.

On February 26 the real Nogi started from west of Liaoyang, and, with his left covered by the 2nd Cavalry Brigade, he crossed the Hun at Hsiaopeiho on the 27th, and moved up the right bank, swinging forward his left as he went, pivoting on the left of the Second Army, which came round with him, fighting for every foot of ground.

On March 4 Nogi came up against the Russian inner line of works round Mukden, and edged away northwards till finally, on March 10, his three divisions lay exhausted some six miles northwest of Mukden, parallel with the railway, and only 8000 yards from it, unable to break through the thin line of the stubborn flank guard, behind which the whole Russian Army was streaming away North.

While Nogi's turning movement was in progress, the Russian centre and left had been held fast to their ground by the continuous bombardment and constant attacks of the Fourth, First, and Yalu Armies, while the Second Army swung round with Nogi, pivoting on Lin-sheng-pu.

On the night of March 7-8 the Russian centre and left broke, closely pursued by Nodzu and Kuroki across the Hun, the latter pushing on, on the 10th, right past Mukden, where the dotted line of that date bulges northwards, dividing the Russian left from the centre.

It was due to the sudden break of the centre and left, and Kuroki's rapid pursuit across the Hun, that the Japanese appear to have almost surrounded Mukden, giving rise to the idea that Oyama had conceived a second Sedan, and intended to surround and capture the whole Russian Army; such was not the case.

It is interesting to follow Nogi's turning movement, and the disposition of the Cavalry in greater detail.

On February 27 Nogi crossed the Hun and formed a line facing north from Kalima to Mamachieh, his 9th, 1st, and 7th Divisions in order from right to left, the 2nd Artillery Brigade

in rear of the right, and the 2nd Cavalry Brigade in advance of his left flank at Rokanshi.

Akiyama's Brigade, and four divisional squadrons of the 5th and 8th Divisions of the Second Army at Sanchiaza, also crossed the Hun, keeping touch with Nogi's right.

On February 28 Nogi's left reached Chentzukung, Cavalry at Yokakahoo, but his right was stopped before Ssufangtai, the right of the Russian line ; Akiyama conformed.

On March 1 Nogi's left reached Polintzu, and his Cavalry Tamintun, while a detachment entered Hsin-min-tun unopposed, and took possession of an immense supply depôt.

Ssufangtai was taken at midnight.

Of the Russian Cavalry, about fifteen squadrons only had been met North-West of Ssufangtai, and they retired North-East.

Akiyama had been stopped by artillery fire from Ssufangtai, and had remained South-West of Changtan, keeping Oku's left in touch with Nogi's right.

The left of the Second Army had begun its movement in sympathy with Nogi, and after desperate fighting had crossed the Russian first line and taken Changtan.

Akiyama was now transferred from Oku's command to the Third Army, leaving the four divisional squadrons behind him.

On March 2 Nogi's left and centre reached Lamuhö and Shaliho respectively, and the 2nd Cavalry Brigade Mashanchiatzu, but his right could only get to Piaototzu, and Akiyama was sent to Panchiatzu to fill the gap between the right and centre.

March 3 the left and centre stood fast to let the right close up, and repulsed a counterstroke by the Russian 16th Corps—Kouropatkin's reserve.

The 2nd Cavalry Brigade at Mashanchiatzu, supported by two battalions, met and defeated the attack of a Cossack division from the North-West.

On March 4 Nogi came up against the Russian inner line of semi-permanent redoubts, and was stopped.

These works formed a bridge-head, running from the Mukden-Hsin-min-tun road by Funtai, Likuantun, and Mochiapu in a semicircle to the Hun, South-East of Mukden.

On the same day the two Cavalry brigades came together at Mashanchiatzu, where a Cavalry division was formed under Akiyama, with two batteries of captured guns and six machine guns, and with two battalions in support; it moved on to Chienhsintaitzu, where it was opposed by superior force.

March 5 there was no move: Oyama was preparing to relieve Nogi in front of the Russian works, and edge him away North.

During the night the 3rd Division from the General Reserve came up and took the place of Nogi's 9th Division in front of Likuantun; the 1st Division in front of Funtai stood fast, and the 7th Division moving northward, the 9th Division came in between them on the Hsin-min-tun-Mukden road.

On March 6, Nogi's left extended up to Kushian, and his right to Funtai, with the Cavalry Division at Erhtaitzu.

It must be remembered that Nogi was never *en l'air*, his right was always in close touch with the left of Oku's Second Army, which swung round with him pivoted on Linshengpu, as shown by the dotted lines on the sketch from day to day.

It was opposite the Russian works at Likuantun and Mochiapu that the most desperate fighting of the whole battle took place, owing to Oku's determination to hold the Russians to their trenches opposite him, and thus facilitate Nogi's progress to the railway north of Mukden, which was his objective.

On March 7, Nogi's left pushed on to Ssutaitzu, but his centre and right, though they fought heavily all day, hardly made ground.

The Cavalry Division from Tahsinton sent out a party which succeeded in slightly damaging the line at Huchatai.

It was now evident to the Russian Commander that his line

of communications was in danger, and he was bringing up all his reserves to hold off Nogi and Oku, while his centre and left fell back.

On March 8 Nogi's left attacked Santaitzu without success, his centre advanced another mile, and his right succeeded in repelling a counter-attack along the Hsin-min-tun road.

On March 9 the 8th Division of the Second Army relieved Nogi's right (1st Division), and again he made the crab-like movement northwards to push the Russians off the railway.

The 1st Division now attacked Santaitzu, where the 7th Division had failed the previous day, while the latter attacked Wang-chen-chung, both without success ; the 9th Division, now forming the left, occupied Kuochitun within three miles of the railway.

That night sixteen Russian trains went north. The Cavalry Division was still opposed by superior forces at Tahsinton and Hsiaohsinton, where they were securely entrenched.

On March 10 practically the same positions were maintained : the Infantry could make no headway, and the guns alone could reach the railway, behind which, all day long, the Russian Army was streaming away North.

Such was the culmination of the ten days' fight, the victory won, but the fruits of it slipping away before the victor's eyes.

The Third Army was stone cold, exhausted by ten days' fighting and marching, and the loss of 20 per cent. of its numbers.

Superior force was lacking at the decisive point, and no fresh troops were available.

The Cavalry Division stuck to Tahsinton and Hsiaohsinton all day, and when towards evening the Russian flank Guard sullenly withdrew across the railway, and marched off in rear of the route, there was no pursuit, certainly West of the railway ; East of it, the 2nd Division of the First Army did push on, reaching Yilu on the morning of the 11th, and taking some 4000 prisoners *en route*.

If ever there was a chance for Cavalry during this war, surely

it was on the night of March 10 ; then was the time to throw caution to the winds, and let Akiyama's squadrons go for all they were worth at the flanks of the demoralised mob that struggled northwards through the frozen night : for, even unmolested as it was, the Russian retreat soon became a rout ; next day their road was strewn for miles with débris, carts, wagons, and guns, piled in tangled heaps at every drift, like the wreckage of a railway accident, evidence of a state of confusion which volleys from the darkness would speedily have turned to uncontrollable panic.

That Akiyama acted according to orders, which in view of his comparative weakness bound him tight to Nogi's flank, is probably the explanation of his inaction, for we must remember that *the Cavalry Division were not independent* : it formed part of the Third Army, and was given to Nogi to protect his exposed flank. This task, in spite of numerical inferiority, it had, with Infantry support, successfully performed, aided by the peculiar adaptability for defence of the mud-walled villages with which the plain is thickly dotted, and the almost magnetic attraction which entrenchments exercised upon the Russian Cavalry.

On March 13 we find the Third Army facing North between Liao and the railway, while the leading divisions of the Fourth and First Armies are still South of the Fan-ho, with the Cavalry Division on their left.

On March 16 Tiehling was occupied, and there all pursuit ceased, the Russians going right away North.

So ended the battle of Mukden.

THE FRENCH CAVALRY

By **LIEUT-COLONEL H. C. LOWTHER, M.V.O., D.S.O.,**
Scots Guards

THE present year being the first in which officers of the British Army have ever attended the year's course of instruction at the French Cavalry School at Saumur, this seems a suitable occasion to give to the readers of the *CAVALRY JOURNAL* some idea of that celebrated school as well as of the French Cavalry in general, what they do and how they do it.

For it is to be hoped that in the future many British officers may be permitted to pass through Saumur, and thus help to forge a further link between the two nations.

The French Cavalry consists of 79 Cavalry regiments stationed in France and 10 stationed in Algeria and Tunisia. The latter regiments, being under rather different conditions, will be referred to separately.

The regiments in France are: 13 of Cuirassiers, 31 of Dragoons, 14 of Hussars, and 21 of Chasseurs. The Heavy Cavalry may shortly be reduced by one regiment, for the 18th Cuirassiers are by way of being turned into the 32nd regiment of Dragoons; but so far the metamorphosis has not been completed. Perhaps it is that the riots of last year, where Cuirassiers were employed, made the authorities doubt their own wisdom in making the change. The Cuirassiers have certainly a great advantage in dealing with mobs, and can sustain a rain of stones, bottles, and revolver bullets without incurring much damage, as many of the Cuirassier regiments can testify from personal experience.

There is a great diversity of opinion in France as to the utility nowadays of the *gros frères*, as the Cuirassiers are called. Many laugh at the 'men in armour' and say that they would be wiped out before their slow charge could get home; but others, and particularly the *gros frères* themselves, say that—as it was put to me by one of their own officers—'on modern battlefields it is only by means of the Cuirassiers that we shall be able to give ourselves elbow-room' (*nous donner de l'air*).

This remains to be seen. One thing is certain, and that is that the cuirass gives the men confidence, and that it will turn a great number of bullets striking it obliquely, and even fair hits at medium ranges.

The Cuirassiers are armed with the sword and carbine, and adopt tactics rather different from the rest of the arm and peculiar to themselves, reserving themselves for charges in which they can put in the whole of their weight. An ideal combination is that of one or two brigades of Cuirassiers with a brigade of Light Cavalry: the latter clear the ground and obtain information while the Cuirassiers are carefully nursed and brought up to where they can best deliver their blow, without being first tired out by the rapid work to which they are unsuited.

The Dragoons (Medium Cavalry) carry the sword and carbine, but in the regiments belonging to the Cavalry divisions they have the lance in addition. The Medium and the Light Cavalry have no perceptible difference of tactics.

The Light Cavalry, consisting of Chasseurs and Hussars, are also armed with sword and carbine only, and are mounted on proportionately lighter animals than their heavier comrades of both denominations.

Taking the question of Cavalry tactics generally, there is no doubt that on the Continent the power of the rifle has not yet been recognised. Europe had not much to learn from our South African war, but they could have learnt one thing at least—namely, how great an effect can be produced by active well-led Cavalry by means of small-arm fire on the many

occasions when shock tactics are out of the question. This has never been learnt in France any more than in any other Continental country, and the dismounted work which one sees at the French manœuvres is—according to our own ideas—elementary. (In fairness it must be said that French officers who have seen our operations at manœuvres reproach us for our excess of dismounted work, and in avoiding it they themselves act in the full knowledge of what they are doing.) Their dismounted work generally resolves itself into a few dismounted posts being thrown out round a unit when halted, or into the defence of a bridge or isolated post; aggressive action by fire is quite the exception.

The axiomatic principle laid down is that ‘Cavalry nowadays will not have the same opportunities for shock tactics which used to exist; it must therefore use to the full the other means at its disposal, but without relinquishing its *rôle* of Cavalry, and must retain the ability to charge when the occasion offers.’

This is a sound enough axiom, and one with which the most anti-Cavalry crank could hardly quarrel: but the efficiency of general principles depends upon their application, and the application in France of the above-stated principle presents a very liberal interpretation—so liberal, in fact, as to be unrecognisable by the casual observer.

The Cavalry in France is organised in eight independent Cavalry divisions and nineteen Cavalry brigades. In principle each brigade has two regiments and each division has two brigades. In some cases, however, both divisions and brigades have three units each, but it is unnecessary to enter here into these abnormal organisations.

The Cavalry divisions are, for obvious reasons, all stationed on or east of the Paris-Lyon line. The other nineteen brigades form the ‘Protective Cavalry’ and are distributed at the rate of one per army corps to the nineteen army corps in France.

Besides providing these corps with their divisional squadrons the corps brigades have, during the last two years, been called

on to furnish mounted scouts for Infantry regiments at the manœuvres. These scouts are an experimental measure only, but have so far met with great success, and with the approval of all except the officers of the regiments called on to furnish them. By their use the march of detached regiments is much accelerated, for two or three mounted men can make good ground in five minutes which it would have taken the 'foot-slogger' half an hour to cover. Their use is greatly appreciated by the Infantry ; it is only their abuse that is likely to cause them to be given up again.

Regiments have five squadrons in peace, but only take four into the field on mobilisation, the fifth squadron acting as a *depôt*. The establishment of a squadron being approximately the same in peace as in war (about 160), regiments can take the field at very short notice, and would not, except during the period October–February, when the young soldiers are being trained, be obliged to wait for reservists, for the fifth squadron would provide a certain number of men and horses in exchange for recruits and cripples transferred to it. Mobilisation is practically instantaneous with the regiments on and near the eastern frontier, which are kept at a higher peace establishment than the others.

In Algeria and Tunisia the Cavalry is represented by six regiments of *Chasseurs d'Afrique* and four *Spahi* regiments. The *Chasseurs* are recruited from the white population of the two provinces and draw the remainder of the men required from the South of France. Their remounts, as well as those of the *Spahis*, are drawn entirely from local resources. These horses are small sturdy Arabs, very lazy at a walk, but full of endurance and able to eat almost anything ; about seventy or more per cent. of them are white or grey.

The *Spahis* are recruited from among the Arabs, but the majority of the cadre is European. These regiments wear a picturesque semi-Arab dress of a red *Zouave* jacket, baggy blue trousers, and soft red Moorish boots. A red cape, with a white 'haik' forming a hood, gives the finishing touch to a fine wild costume.

The weight carried by the Cavalry horse runs from about 300 lb. in the Cuirassiers down to 220 lb. in the Light Cavalry.

There is nothing particularly remarkable about the saddlery, except that the breast-plate is replaced by a breast-strap passing across the horse's chest. Picketing gear is not carried on the horse, for horses are usually billeted, but a long rope and pegs are carried on the wagons.

The transport in the field consists of a forge wagon per squadron and per regiment, twelve supply-wagons per regiment (six only in the regiments of the Cavalry division), and two light ambulance carts.

Machine-gun sections of two guns per regiment are being formed as fast as the guns can be made and issued. This gun is known as the 'Puteaux' gun, being named after the Government factory where it first saw the light. It is a handy little tripod gun, firing the service cartridge, which is fed to it in steel strips holding twenty-five rounds each. Its mechanism is fairly simple. It has no water-cooling arrangements, but when the barrel becomes over-heated a spare barrel can be substituted in a few seconds.

Most Cavalry regiments have a light three-horse wagon with bridging equipment sufficient to make a light foot-bridge of some twenty yards in length. Over this the men and kits can be passed and the horses swum alongside. If several bridge-wagons are available the gear can be combined and a broad bridge be made strong enough to take transport vehicles.

All remounts are bought in France, though this fact is not a guarantee that the horses are of French origin, for there is no knowing where the dealers may have procured their stock. As a matter of fact most of those bought in Paris come from England.

Purchases are made by permanent boards travelling about the different regions from October to May. Preference is given to the produce of the Government sires, of which there are a great number. All the stud department is under the

Minister of Agriculture, but the stud and remount departments are always in touch one with the other.

Ninety per cent. of the remounts bought are of five or less years of age ; eight years is the outside limit. The troop horse serves on an average about eight years in the ranks, an officer's horse about a year less.

The height runs from a minimum of 14.2 in the Light Cavalry to 16.0 $\frac{1}{8}$ in the Cuirassiers. The average price is from £36 to £45, but as much as £120 for a thoroughbred and £80 for a half-bred horse is paid for some of the horses at Saumur, and if one may judge by appearances the Government has secured some very good bargains in these purchases.

The impression of the writer is that in France, as in England, the Cavalryman's nightmare of being turned into Mounted Infantry prevails ; but that in France he has so braced himself against the idea as to throw himself further than ever into the shock school and away from fire tactics.

This being the case, it is not surprising to find that musketry receives little attention as compared with swordsmanship, although of recent years it has occupied a more important place in the curriculum than used to be the case. It is unlikely that any very great advance in Cavalry musketry will be made until they have a weapon which is on more even terms with the rifle than is the present carbine. It is not known when that change will come, but it will probably be when a new rifle is issued to the army generally ; that is to say, any time in the next five years, or when a change is forced on France by the contemplated rearmament of other nations.

The Cavalry soldier is worked very hard at swordsmanship, and the value of the point as compared with the edge is ever impressed on him. 'The man you have *cut* down will soon be in the field again ; give him the *point* and he is done for.' Such is the legend written in large letters on the wall of many of the Cavalry fencing-rooms, and such is the principle applied in instruction.

Among the many practical dodges pressed into the service to add interest to the instruction may be cited the following : To develop muscle and give some idea of the feel of a weapon passing through an adversary's body, a block of clay is used ; it is placed on a table three or four feet high, and the soldier cuts and thrusts at it until he is exhausted. If the point or edge be not fairly given, it does not penetrate, and it must be given with strength too ; the usual little prod of the fencing-school is insufficient. The clay is kept at the right consistency by having a wet cloth thrown over it at night.

In many barracks there is a dummy horse with saddle and bridle : round this are hung six balls, to the right and left, and to the right and left front and rear, and at these the rider thrusts at the word of command of ' right,' ' left rear,' &c.

Another fine exercise is given by turning out into a big *manège* one or two loose horses with dummies strapped to the saddle. Half-a-dozen men go after them with light blunt sabres and attack the dummies. The loose horses soon seem to learn what is required of them, and acquire much skill in avoiding the swordsmen. If a couple of jumps are left standing, it adds interest and amusement to the proceedings.

The French officer probably has not his equal anywhere in the world in the application of the use of the ground to the movements of formed bodies of troops, and the way in which regiments and brigades slip across the country unobserved is astonishing. This will be borne out by anyone who, at the French *manceuvres*, has gone in pursuit of the Cavalry and has found himself riding past them time after time without finding them. Their position is rarely divulged by the presence of the commander, who is usually far ahead. And even the brigade commander with his flag is not noticeable, for he has so small a staff that he attracts little attention, provided always that he keeps the orderly with the flag concealed in or against a convenient tree.

All Cavalry officers are interchangeable. That is to say, that on promotion a man may be moved to any regiment of any

branch of the arm, promotion being in the arm generally. We cannot understand that, neither should we like it, for our regimental feeling is too strong. But every country has what suits it best, and our system would be wholly inapplicable in France, where regiments stay for ever in the same garrisons. The result of our system in France would be that officers would not stay in the dull little provincial garrisons, whereas in popular garrisons, such as Paris and the big towns, they would grow grey in the subaltern ranks.

The French officer is a tremendous worker. He has long hours and little leave. The effort required of him can be realised when one remembers that nearly half the men with the colours are replaced by recruits every year in October.

The period of service being now two years with the colours, the only men who serve longer are those who have voluntarily engaged, and those who have extended their service with a view to promotion or in order to become employed men.

Between October and February, then, the young soldier has to be taught the whole art of war and be ready to take the field by the latter of those two dates. During that time the officer gets little help from the men of the last year's contingent, for they are fully occupied in looking after the horses; so he, with the help of a proportion of his N.C.O.s, has to do everything. It would be impossible to do what is necessary were it not for the high average of education of the man in the ranks. This is an advantage common to all countries where service is universal and compulsory, and it is easy to imagine how the work of a squadron leader is facilitated by having, in a squad of thirty or forty recruits, elements such as the following which were once enumerated to the writer: two law students, two sons of country gentlemen and habitual followers of hounds, two sons of well-to-do farmers, one budding architect, and five or six others who had been used to horses all their lives.

This was, of course, an exceptionally good batch; but the leaven of high education is a great assistance and goes far towards

helping along those who have been less well endowed by nature or opportunity.

From the well-educated classes in the ranks are drawn the officers required for the reserve.

Those presenting themselves for reserve commissions are given a special course of instruction in addition to their ordinary work and are promoted—on passing an examination—first of all to non-commissioned rank, and then to the rank of sub-lieutenant in the reserve, serving as such during the last part of their two years' service.

After that they are called up every other year for three or four weeks' service with the active army or with reserve units.

Lads intending to enter the Cavalry of the active army as officers can either go through St. Cyr—the French Sandhurst—for two years, and then to the Cavalry school at Saumur, or else they can join the ranks of the army at the age of eighteen or over as privates, be promoted to non-commissioned rank in about a year, and then, after three years as N.C.O., and having successfully passed a competitive examination, arrive at Saumur.

Under the present conditions, which are likely to undergo an early change, there is little difference in the age at which a lad arrives at a commission by these two routes: the advantage is rather in favour of the ranks; for even if he goes to St. Cyr, the cadet must first spend a year in the ranks as private, and, in addition, has to 'cram' much more severely for his examination.

It is interesting to draw a comparison between the French and German methods of training. In Germany the recruit is taught each step of his training perfectly before he goes on to the next; in France they teach the man to *do* any given thing—not necessarily to do it smartly, but to get it done. When the last item of training has been imparted any further polish required can then be put on.

The result is that the French soldier is ready to take the field much sooner than his eastern neighbour, though his movements might not then be such as to satisfy his drill-sergeant.

To show what can be done with the raw material, the writer may say that early one January he saw a batch of Cavalry recruits who had only been training since early in November, and who had in that short time learnt the following elements of their profession: Foot drill, manual and sword exercises, being able to give a useful thrust with the sword; musketry sufficient to put their shots there or thereabouts at five hundred metres; to look after their horses; troop-drill mounted, and to ride sufficiently well to sit over small fences and rally on their troop leader at a gallop; to receive and transmit simple verbal messages.

The standard reached was certainly exceptionally high, for the corps in question has an unusually fine body of N.C.O.s, but other less-favoured regiments would not have been far behind.

The great Cavalry school at Saumur (*l'école d'application de cavalerie*) fulfils many functions, all contributing to the well-being or improved knowledge of the mounted branches of the army.

The three principal divisions of the school are the following:—

A class of about eighty sub-lieutenants who have just passed out of St. Cyr and who have been gazetted to their regiments.

A class of the same number of *Elèves Officiers*, i.e. N.C.O.s who have passed the necessary qualification for commissioned rank.

Two classes of subalterns of about seven or eight years' service, about a hundred in all: the number of students of this denomination is to be raised to about two hundred. One of these classes is for Cavalry and the other for Artillery. There are also usually a few Engineer officers going through the school.

All the above classes stay at the school for ten months, after which they join their regiments just in time to go on the manœuvres, and ten very busy months they are, for the lads are at work with little intermission from the early morning till five in the afternoon.

Besides these classes there are departments for putting a final

polish on and giving a military education to aspirant veterinary officers, a school of farriery, of telegraphy, of fencing, and finally a saddle factory where saddlers are taught and where the whole of the saddles for the French Cavalry are made.

The instruction given to the three chief divisions of the school is first of all in equitation, which includes riding, knowledge of breaking and training horses, the teaching of others how to ride, farriery and a superficial but sound veterinary knowledge, *i.e.* how to recognise and treat the common ailments and injuries, and what points to look for in buying horses.

The riding instructors (*écuyers*) are a splendid body of horsemen. They are selected not only for their military horsemanship but also for their performances between the flags; and as the students spend nearly twenty-four hours a week under their instruction it will readily be understood how important a position is theirs in regard to the curriculum.

Each student brings his own horse and is given besides a half-trained and a three-quarter trained remount for his own riding, whose training he has to carry on. These horses are known respectively as *chevaux de dressage* and *chevaux de perfectionnement*.

Besides this there are a number of *chevaux de carrière* for outdoor work over fences: these horses belong to the school and are thoroughbreds. As each of these four horses is ridden by the student practically every day, it will be seen that he is kept busy, but not so busy as the *écuyer* who usually rides double that number of horses every day.

The accommodation for riding instruction is very complete, for there are five riding-schools, a number of open-air *manèges*, a large central square with a gallop and fences round it, and also two training grounds outside.

At the further end of the latter, known as 'Verrie,' there are a couple of hundred acres of land available. The ground is very like the surroundings of Aldershot, with the 'heath and scattered firs,' which used to figure in the old table of conventional signs.

The trees and bushes have not been cleared entirely ; fences, often of eighty yards in length, have been erected in suitable places, and as one often comes galloping up to them through the trees, or has to make one's way through trees on landing, a far better test of riding is afforded than by the usual formal winged fence to which one is used.

At Saumur one never sees horses brushing through their fences, for the very excellent reason that if they did so they would very soon break their necks. The obstacles are not simple bushed fences which one can go through about a third of the way down, but have running through them a timber like the mast of a ship, which will neither give nor break, and which teaches horses to chance nothing.

The instruction given at Saumur other than equitation covers a wide range, and includes all that we teach regimentally as well as that for which we have special courses, such as field engineering and musketry. There are staff rides, work in the field in which the students form troops and squadrons and act as N.C.O.s and privates, foot drill, and fencing.

Under the heading of 'theory' are taught topography, a knowledge of the neighbouring armies and military terms, telegraphy and the war-game.

From these few short notes it will be seen that the French Cavalry officer has an opportunity of providing himself with a fine mental military equipment on his entry into the service, and to fill up any gaps in his knowledge when he has served for a few years.

And this is not all, for there have been lately instituted a series of senior officers' courses of a couple of months each, which permit men who are likely to succeed shortly to the command of a Cavalry regiment to bring themselves up to date and see and hear all that is newest in Cavalry thought and teaching.

As regards seat, the chief difference from our own is that the Frenchman keeps the lower leg further back than we do, the idea being that the 'aid' of the leg is always in position ready

to do its work without having first of all to be brought back into its place.

The difference is a small one it is true, but the effect to the observer is that the French horseman is always 'busy riding.'

Although the average French officer has not had the advantage which practically all English Cavalry officers have had of riding from their early childhood, there is no doubt he is on the average a very fine horseman, with a deep and thorough knowledge of horsemanship, horsemastership, and everything pertaining to those arts. He is not content simply to get up and ride; he wants to, and does, know the why and wherefore of everything and how it is to be improved.

He might not perhaps ride over a hunting country at short notice, as would the Englishman; but then hunting countries as we understand them, with their number and variety of fences, do not exist in France, and he has not had the choice of a hundred packs of hounds wherewith to serve his apprenticeship. But he would soon learn the game and, if one may judge by the few who have hunted in England, would quickly give a view of his coat-tails to all but the first flight.

He is a fine steeplechase rider, and I have seen fast-run officers' races at Auteuil where large fields of twelve or fourteen starters have finished well together without disaster.

Certainly, if the French officer did hunt, he would be ashamed to turn out on some of the half-broken kicking brutes that one too often sees endangering their owners' necks and bringing discredit on our national reputation as horsebreakers.

For the Frenchman is above all a horsebreaker and horse-master. He learns both arts at Saumur, and applies them with a patience and steadfastness of purpose which would not be expected by those who only know the volatile surface of French, or rather of Parisian, character.

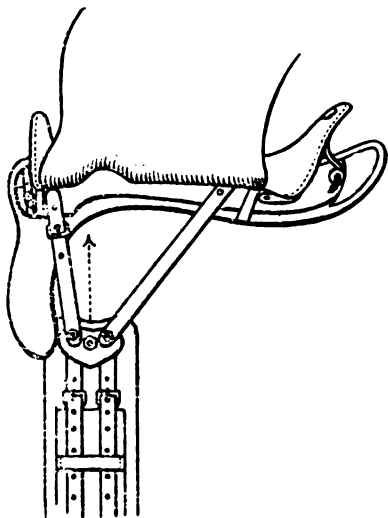
THE 'V' ATTACHMENT FOR GIRTH ON THE SERVICE RIDING-SADDLE

By MAJOR J. HORTON, *Inspector of Saddlery (late Riding Master 4th Dragoon Guards), the inventor*

THE 'V' attachment, correctly fitted to the saddle as illustrated, allows the position of the girth to be adjusted according to the conformation of the horse.

The front upper straps are neither to be buckled and unbuckled daily when girthing, nor utilised for making suitable a girth that may be too long or too short. Care should be taken to buckle the 'near' and 'off' upper straps in corresponding holes.

There are three holes in the front upper strap ; the *centre* one is the normal position of the attachment (see diagram), and should be $6\frac{1}{2}$ inches from the pivot of the strap ; the *upper* and *lower* holes are provided for the adjustment. No further lengthening or shortening of the front or rear straps can be made without detriment to the bearing of the saddle ; additional holes, therefore, should not be punched.



The front upper strap in the centre hole places the girth to suit a very large percentage of horses ; on animals with straight shoulders, that carry the saddle too far forward

on the back, the front strap should be buckled in the lower hole and worn short, being set to hang straight from the bar by twisting it and the near strap on the rivets. This position will place the saddle as far back as is possible.

On animals of the greyhound type, on which the saddle has a tendency to work back, the front strap should be worn long, *i.e.* buckled in the top hole.

Altering the set of the girth for galls, instead of employing pads or softening materials locally, is wrong ; it only produces wither chafes or sores under the rear bearings of the saddle.

The attachment is fitted by screws and rivets to the side bars of the saddle to fixed dimensions, and should not be altered by the saddler.

The advantages of this 'V' attachment are :—

1. It places the girth buckles well below the pressure of the rider's knee, and in consequence the pannels do not require flaps, for the blanket affords sufficient padding.

2. It is easier to girth up the horse, as the girth buckles hang low, and well within the reach of short men.

3. The upper ends of the attachment straps being set wide apart prevent the saddle tilting, and the points of the front arch can be dispensed with.

Moreover, the rear straps being attached well back on the bars prevent the rear of the saddle rising and falling when the rider is rising in his stirrups to the trot.

4. The brass plate and rivets on the sweat flap allow the straps when adjusted on their pivots to take the set for the girth to work in the necessary position, and to take the strain fairly.

The experienced eye will detect a faulty adjustment in most cases by the position of the saddle when the rider is mounted.

The proper position of the girth on the horse, and its point of attachment to the saddle, can be readily demonstrated.

Place a surcingle round the body of the animal in the position it would naturally take on a numnah—that is, round the smallest circumference, which on a well-formed horse would be just

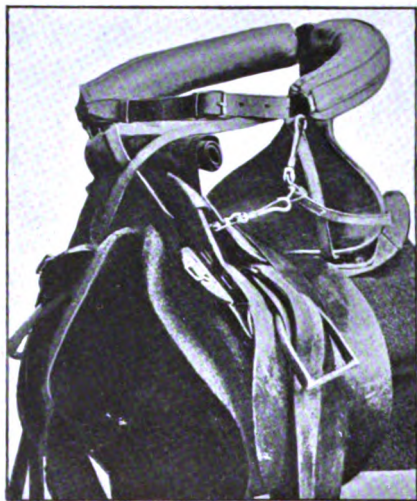
behind the withers and about 9 inches from the animal's elbow. If a saddle is then placed correctly on to the animal's back over the surcingle, the front edge of the latter will be found about two inches behind the front arch. This is the correct point of attachment for the girth, and not in the middle of the saddle, as is often erroneously supposed. Were ordinary girth straps fixed to the centre of the saddle, say about 9 inches from the front arch, and the girth attached, the position given would cause the saddle to ride forward over the animal's withers, and the hind part of the saddle would be depressed.

On the contrary, were the straps fixed too far forward—that is, on or in front of the front arch—the position of the girth would force the saddle too far back on the animal. Between these extremes lies the correct mean, which differs according to the formation of the horse.

The attachment fitted in the centre hole suits the majority of horses, and by means of the other two holes a limited adjustment is possible to meet the cases of the malformed minority.



The centre photograph is reproduced, by kind permission, from the Journal of the R.A.M.C.



THE COLLECTION AND TREATMENT OF WOUNDED CAVALRY.

PRÉCIS OF A LECTURE ON THE COLLECTION AND TREATMENT OF WOUNDED CAVALRY

Delivered by **LIEUT.-COLONEL MACPHERSON, C.M.G.,
R.A.M.C., at the Cavalry School**

INTRODUCTION

‘WHAT he has not got with him in the field, a Cavalry soldier hasn’t got at all,’ is the remark of an Austrian Cavalry officer which aptly indicates the difficulty of dealing with Cavalry soldiers, whose rapidity of movement and often wide dispersion make their collection and treatment by the Cavalry Field Ambulances a matter of great difficulty.

As long as there are no wounded, it is easy enough to keep the medical *personnel* in touch with units, but when men have to be attended to, the medical people may be left far behind and find it almost impossible to rejoin.

When Cavalry are dispersed over many miles of country the difficulty of sending medical aid to their wounded and of bringing in serious cases is, compared with the case of Infantry, great ; but, on the other hand, the mass of wounded to be dealt with is comparatively small.

Conversely, should the casualties be concentrated in the space of one or two sharp Cavalry engagements, their collection and treatment is facilitated and several medical units are likely to be on the spot or near it.

EXISTING MEDICAL ARRANGEMENTS

The present medical arrangements for Cavalry are as follows :—

- (a) The Regimental Medical Service.
- (b) The Cavalry Field Ambulances.

The Regimental Medical Service of each regiment includes :—

- 1 Medical Officer.
- 1 Corporal and 2 men of the R.A.M.C.
- 1 Lance-Corporal and 1 Private of the regiment as orderlies.
- 8 Privates of the regiment trained in ' sanitation.'
- 12 Bandsmen trained as stretcher-bearers.

The Medical Equipment includes :—

A Field Dressing, carried by every officer, N.C.O., and man.

A pair of Field Medical panniers	} Carried in the Maltese Cart.
A Medical companion	
A Surgical haversack	
3 Stretchers	

A pair of Surgical saddlebags carried by the Lance-Corporal orderly.

The Cavalry Field Ambulance includes :—

- 6 Officers, and 70 other ranks of the R.A.M.C.
- 44 Drivers and batmen of the A.S.C.
- 2 Water-carts. 2 Forage-carts. 2 G. S. wagons.
- 4 Light Ambulance wagons.
- 6 Heavy Ambulance wagons.

It is divided into a Bearer Division, 40 of all ranks, and a Tent Division.

The Bearer Division collects and brings in the wounded which the Tent Division receives, treats, and evacuates to the more stationary Medical units.

Each Cavalry Field Ambulance is divisible into two sections, each containing half the Bearer Division and half the Tent Division.

The Cavalry Division has four Field Ambulances and each Mounted Brigade has one.

VARIOUS PROBLEMS PRESENTED

The operations of the Independent or Strategic Cavalry present more difficult problems for the medical service than do those of Protective or Divisional Cavalry, because the latter are more closely connected with the slower moving Infantry and the medical units of the lines of communication, and the distances over which wounded must be carried before they can be properly housed and treated are less.

Patrolling and scouting work, Cavalry combats, general engagements, pursuits and raids, all have their special medical problems, and principles alone can here be indicated.

HANDLING WOUNDED WHEN CAVALRY ARE WIDELY
DISPERSED

Take first of all the case of Cavalry widely dispersed on some duty of observation or reconnaissance.

Wounded men can be classified as follows :—

- (a) Those who can ride or walk unaided.
- (b) Those who require help and special transport.
- (c) Those who are best left where they are, whom it is dangerous to move and whose best chance lies, in civilised warfare, in making them as comfortable as possible where they lie.

DUTY OF THE COMRADE

The function of the Regimental Service is to afford first aid, and bring the wounded back to the Field Ambulance.

By regulation only four men per squadron need be trained, though any number may volunteer for instruction, but in the lecturer's opinion every Cavalryman should have some knowledge of first aid and methods of carrying wounded.

The Cavalry officer on detached duty is often in the position of a captain of a ship with no doctor on board, and not only he but every man in his command should know at least how to use

the field dressing, to recognise serious bleeding and stop it, and to tell a broken limb and how to fix it before any attempt is made to carry the patient back. Granted this knowledge and its successful application, the next step is to get the patient back to the Regimental Medical Service.

If he can ride he should find his own way back, at the same time possibly carrying information, and it is useful to have fixed in Orders some prominent spot where the first line of the Regimental Medical Service will be found, or possibly where a detachment of the Cavalry Field Ambulance will have been established. In case of more severe wounds, the important point will be to send back information to the Regimental Medical Service and arrange means of transport.

If the patient can be got to a point on the nearest road and placed under shelter, information should be sent back as follows :—

- (a) The exact spot where the man is lying.
- (b) A description of the wound, the part of the body affected, the nature of the weapon or missile that caused the wound, whether the limb is fractured or not.
- (c) The patient's condition, collapsed and unconscious, or able to attend to himself.

A rough sketch indicating the spot should be added.

Practice in transmitting this kind of information should be given during the manœuvres.

DUTY OF THE REGIMENTAL MEDICAL SERVICE

The next point is the action of the Regimental Medical Service.

Undoubtedly, the medical officer and his staff, including all the twelve stretcher-bearers, should be with the headquarters of the regiment; there he most readily receives information of wounds, and having his stretcher-bearers with him can give them instructions direct: the medical officer cannot personally dash off to attend each case himself, but only the most serious.

The next questions are, how are the wounded to be carried, and where are the regimental stretcher-bearers to place them ?

The only provision made in the British Medical Regulations is one stretcher per squadron—these are the ordinary stretchers, ill adapted for carriage on horseback and therefore conveyed in the Maltese cart.

The bearers despatched to bring in the distant wounded must therefore either ride to him without a stretcher, or transfer it to a light ambulance wagon borrowed from a Cavalry Field Ambulance. There are numbers of improvised methods of carrying the wounded Cavalryman, of which the following are the most practical :—

1. Colonel Hathaway's crutch or cradle, which can be fixed to the saddle and prevents the wounded man from falling if he is able to ride astride (see illustration).

2. Litters and cacolets improvised from materials found on the spot are difficult to make, but the Arab method of carrying a wounded man lying down across the saddle is easy enough ; all that is required is to fix improvised panniers on either side of the saddle, sacks stuffed with straw, baskets or empty boxes, and on them across the saddle fix a board, shutter, stretcher, or anything available, and strap the wounded man on it.

This is by far the most comfortable position for a wounded man to be carried on horseback (see illustration).

3. The 'travois,' *i.e.* a couple of long poles fixed to either side of the saddle, with the free ends trailing on the ground, and a blanket, great-coat, or other suitable material tied on between them. The wounded man is placed on the blanket and dragged away ; by cutting one pole $1\frac{1}{2}$ foot shorter than the other, unevenness in the ground is minimised (see illustration).

If, instead of leaving the free ends trailing on the ground, they are fixed to the saddle of a second horse, a Chinese horse-litter is formed, such as the Russians used in Manchuria.

4. Probably best of all, however, is the bicycle stretcher, either improvised with ordinary cycles, or specially constructed,

with parts that can be dismounted so that the wheels can be brought parallel to each other and stretcher poles and canvas rigged between.

This is surely the best equipment for Cavalry stretcher-bearers.

The R.A.M.C. training indicates that the light ambulance-wagons of the Cavalry Field Ambulance should be detailed to accompany regiments or squadrons acting independently.

If such a wagon is available and can get to the wounded man, that method of transport is best of all, but when wounded are scattered over a wide area, or where concealment is necessary, one or other of the improvised methods must be used.

TRANSFER TO THE FIELD AMBULANCE

So much for the Regimental Medical Services; the next question is, where are they to place the wounded so that the Field Ambulances can get to them? That touch between the first and second line of the Medical Service should be maintained is essential, and the point of transfer of the wounded from the former to the latter should, if possible, be fixed beforehand.

For example, during the advance of a Mounted Brigade, which will move probably by leaps and bounds from one line of observation to the next, there should be no difficulty in fixing in Operation Orders the successive positions of this Field Ambulance collecting station, moving on, say, every two hours.

To meet the case of wounded arriving after the station has moved on, the medical officer will arrange to leave a detachment.

When strategical patrols or raiding parties have got temporarily beyond all touch with their own army, wounded must either be carried along or left to the care of the inhabitants, with, if necessary, the threat of reprisals if they are ill-treated.

HANDLING WOUNDED WHEN CAVALRY ARE CONCENTRATED— DUTY OF THE REGIMENTAL MEDICAL PERSONNEL

When the Cavalry Division concentrates for the approach march within striking distance of the enemy, the medical arrangements change altogether.

The regimental medical *personnel* should be detached from regiments and grouped in rear of the Brigade or Division: they will be useless in the charge, but their work begins immediately the contest is decided.

They will collect the wounded and place them temporarily under cover till the Field Ambulance arrives.

Here, again, the want of a stretcher capable of carriage on horseback is evident, for the Maltese cart will be with the first line transport two or three miles away, and it is on stretchers that the wounded should be brought to the collecting station.

As soon as the Field Ambulance comes up, the regimental service is set free to follow the pursuit, render first aid, and leave the wounded at fixed spots, sending back to the Field Ambulances to say where they will be found.

In case of defeat in the Cavalry combat, part of the regimental *personnel* will remain under the Geneva Convention to succour wounded left on the field, the remainder falling back with their own troops.

Here, however, British regiments are at a disadvantage compared with Continental armies, in having only one regimental medical officer instead of two.

DUTY OF THE FIELD AMBULANCES

Of the four Field Ambulances attached to the Cavalry Division one will probably be detailed to follow each Brigade when they are separated—when the Division concentrates, so will the Field Ambulances.

Their *rôle* is always a difficult one: not only have they to receive and care for the wounded left for them by the Regimental Medical Service, but they have also to keep touch with quickly moving Cavalry, on the one hand, and evacuate the sick to the Lines of Communication on the other.

Touch with the Regimental Medical Service will be kept, as described above, by the light ambulance-wagons, which will bring in scattered wounded to collecting posts previously fixed.

To these collecting posts the heavy ambulance-wagons will be brought up, and the latter, affording as they do temporary shelter each to four seriously wounded cases, form a small hospital on wheels for twenty-four patients.

Wounded can then be taken on, if necessary, to points from whence an opportunity will occur of sending them back in wagons or other vehicles which bring up supplies to the Cavalry.

In civilised countries, where Cavalry live on the districts through which they pass, vehicles can be impressed to carry the wounded back; in uncivilised countries the Cavalry must receive supplies from time to time, and the empty convoy is available.

When the Cavalry Division concentrates for battle, all its first line transport marches concentrated, probably some two miles in rear of the fighting column.

Here will be the Field Ambulances, and when the collision takes place up go the light ambulance-wagons and Bearer Division to the scene of conflict, while the Tent Division prepares to receive and treat the patients.

A whole ambulance, or at least a section, will follow up the pursuit.

In dismounted action the same principles apply, except that the Regimental Medical *personnel* will go into action with its own unit instead of being grouped in rear of the Brigade or Division till the shock is over.

SUMMARY

To sum up :—

(1) Every Cavalryman must understand first aid and the use of the field dressing.

(2) Methods of improvising means for carrying wounded on horseback or on 'travois' should be practised.

3) Cavalry patrols must know what information to send back to the medical officer so as to help him in collecting wounded.

(4) The chief rôle of the Regimental Medical *personnel* is with the Protective Cavalry and with the Strategic Cavalry

before it concentrates ; and, to help them in collecting the casual wounded, the light ambulance-wagons should be distributed among regiments.

(5) When the Cavalry combat is imminent the regimental *personnel* is concentrated in rear, ready to pick up the pieces when the shock is over.

(6) After the shock the regimental *personnel* should rejoin their units in pursuit as soon as relieved on the field by the Bearer Divisions of the Ambulances.

(7) In retreat, the regimental *personnel* should retire with its unit, leaving a small portion on the field.

(8) The most important *rôle* of the Cavalry Field Ambulance is after the combat, when wounds occur in a concentrated time and space. The Bearer Division will be sent to the scene of combat at once, and the Tent Division established as close as possible to form a dressing station.

(9) During operations involving wide dispersion, the Cavalry Field Ambulance forms collecting posts, to which the wounded can be brought by the regimental *personnel*; it receives, treats, and carries the wounded till opportunity occurs of evacuating them.

(10) Touch *must* be constant and careful transmission of information is essential

(a) Between the Regimental Medical Service and the Cavalry Field Ambulances.

(b) Between the Cavalry Field Ambulances and the Field Ambulances of the Divisions which follow, for these will probably be the link that will join the Cavalry Field Ambulances to the clearing hospitals on the Line of Communication.

Like everything else, the collection and treatment of wounded Cavalry soldiers is a question of sound co-operation between the Staff and Administrative Services.

A SHORT HISTORY OF THE GUIDES CAVALRY

By CAPTAIN J. E. BLOIS JOHNSON, *Queen's Own Corps
of Guides*

THE Guides were raised by Harry Lumsden under the orders of Sir Henry Lawrence in 1846. The object of the corps was to provide trustworthy men, both mounted and foot, who could give accurate information as to roads, rivers, ferries, and passes on the frontier, and act as guides to troops in the field ; and from that time to this the histories of the Cavalry and Infantry of the corps have been indissolubly bound up in each other, though these few pages chiefly relate to the Guides Cavalry. Lumsden started work on his new appointment at Peshawur, where he collected some fifty horsemen and twenty Infantry, chiefly down-country men and Persians. It was not until the cold weather of that year that he visited the Yusafzai district, where he came in contact with the heads of villages from among whose younger sons and relations he soon selected a score of first-class Pathan recruits—men accustomed to look after themselves, and not easily taken aback by any sudden emergency. Among these one Dilawur Khan was notorious. Dilawur the brave was a Khuttak educated by the Mullahs and intended for the priesthood, but the attractions of kidnapping bankers and traders soon made him forsake his sacred calling. His capital consisted of a sword, a rope, and a huge mussack (inflated skin) for conveying his guests across the Indus into Yusafzai when necessary. When Lumsden first met this 'Dick Turpin,' with the idea of making him 'a Guide,' the latter fairly burst out laughing and took his departure across the border,



*Sagri Khuttak
in National Dress.*



Eusafzai Pathan · Full Dress.



Jat Sikh



*Dogra
in Full Dress.*



HARRY . . . LUMSDEN



*Kazil Bash
in Full Dress.*



*Afridis
in National Dress*



Brahmin in Drill Order.



*Punjabi Mussulmen
in Drill Order.*

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though six weeks later he voluntarily turned up, saying that he had come to join the Guides, but pleaded hard to be excused the 'goose step.' However, the commandant held out that he should be taught the complete art of war, and had the satisfaction of seeing the most dreaded man on the frontier balancing on one leg at his bidding. Sharp, observant, and faithful, Dilawur Khan soon rose to be a native officer, was one of the most trusted men in the regiment, and his name was familiar in every village along the Border. His untimely end came when selected to undertake a secret mission to Central Asia, where he was basely betrayed, owing, possibly, to his having become a Christian, and died of exposure beyond Chitral. Under Lumsden enlistment became so popular that a vacancy in the corps was shot for on the range as a prize by the aspirants, with the result that men from every wild and warlike tribe were represented in its ranks, *e.g.* Afridis, Goorkhas, Sikhs, Persians, Hazaras, Waziris, Pathans of every class, and even Kafirs from Kafistan. There was one Goorkha in the Cavalry, but the length of his legs and shape of his body did not permit of his remaining long either in the saddle or the mounted branch. Lumsden sought out men notorious for desperate deeds, leaders in forays, &c., and made Guides of them. For the first few years of their existence they were a roving body of men clothed in their native dresses of various hues and shapes, and armed with flint muskets more than a quarter of a century old, and never seemed to be in any one place for any length of time. One hears of them punishing recalcitrant tribesmen on the Buner frontier; a year later this handful of men, under Rissaldar Futteh Khan, is in Lahore, successfully unravelling a conspiracy for seducing the Sepoys of the line from their allegiance.* In August of the same year, in the vicinity of Multan, the same famous Rissaldar, with some seventy sowars, hearing that a herd of Government camels had been driven off by some of Mul Rajs' Cavalry, was within a few minutes of the alarm in hot pursuit of the

* This account is taken from 'Blackwood's Magazine,' May 1897.

marauders, who, instead of being a small party, as expected, turned out to be the whole of Mul Rajs' Cavalry. Without check or hesitation the Guides charged and recharged this mass of horsemen, who, stupefied by the impetuosity of the attack, stood irresolute, unable to decide whether to retreat or retaliate. Once again their dauntless foes bore down on them, but before the whirling line of Guides horsemen could close with them a third time the enemy broke and fled, closely pursued by Futteh Khan and his victorious band. From this scene of action the corps followed up the Sikh rebels, Ram Singh and Ganda Singh, and took part in the battle of Gujrat, where the Cavalry cut up a large body of Sikh insurgents, including their famous leader, Ram Singh. After this—June 19, 1849—the Cavalry was increased from one troop to three troops, and returned to the Yusafzai country to take part during the next two years in many little frays and forays under their gallant commander.

It was during this period that Lumsden and Hodson, his second in command, agreed in the choice of khaki or dust colour as the uniform of the Guides, with the result that Sir Charles Napier, the Commander-in-Chief at the time, pronounced that they were the only properly dressed light troops he had seen in India. Hodson's brother, a cleric in England, was commissioned to select some 800 weapons of the carbine pattern as an armament for this body of men.

In 1851, a system of frontier defence organisation having been fully considered by the Marquis of Dalhousie, Governor-General of India, Sir Colin Campbell, and Lumsden, in whom Dalhousie placed the greatest confidence, the Yusafzai District and all the country east of the Swat and Cabul Rivers was allotted to the Guides, who were to be located in a defensive central position at Hoti Mardan, in which spot they first settled down on or about October 25, 1851, and where they have been ever since.

Some six months after the Cavalry had been in Mardan they were on the war-path again, for on March 7, 1854, thirty-four

sowars under the same Ressaldar Futteh Khan were ordered to Goojur Gurhi, about three miles north of Mardan, to meet Mr. James before he went on a survey towards the Swat border. Mr. James changed his route and did not go to Goojur Gurhi, but the troopers remained, expecting him. In the middle of the night the sentries observed a body of men coming towards camp, and challenging them received for answer 'Friend,' and on inquiring 'What friend?' were answered 'Sahib,' upon which the Ressaldar ran out of his tent to meet the supposed Sahib. He had no sooner got to the end of the camp than he saw that the party coming towards him had lighted matches, and therefore could not belong to any regiment in British service, so, with great presence of mind, he called out to his men, 'Draw swords, the enemy are on us.' The troopers, surprised, but not daunted, rushed to their arms, met the enemy 180 strong charging into camp, and succeeded in routing and driving them back to the hills within half an hour. Ressaldar Futteh Khan was made 'Khan Bahadur,' and received the highest approbation from the Commander-in-Chief and Governor-General for his conduct in this affair.

Though the Guides Infantry had their grounding in drill from the 60th Rifles, through the kindness of Colonel Bradshaw, the commandant at the time, I fancy the art of drill in the Cavalry branch was not in the same way studied, as it is said that the only words of command used by the Cavalry in those days were 'Draw swords,' 'Hallah' (Hallah = charge). However, this did not seem to affect their conduct in the field, for in all situations and under all circumstances during the first six years of their existence they always did credit to their gallant leader, who in 1852 handed over the command of the corps to Lieutenant Hodson prior to proceeding to Europe; but not before he received well-earned thanks from the Governor-General, who expressed his approbation of the very high merit of Lumsden in the following few words: 'A braver or better soldier never drew sword.'

Lieutenant H. B. Lumsden had great tact and influence over all with whom he came in contact ; he was thoroughly acquainted with the tribes on the frontier, was a fine athlete and sportsman and was beloved by all ranks.

In March 1857 Major H. Lumsden was ordered on special duty to Kandahar, and therefore just missed accompanying the corps on their famous march to Delhi, for on May 13, 1857, the Guides Cavalry and Infantry under Captain Daly marched out of Mardan Fort fully equipped for service within six hours of receipt of orders, and reached Delhi, a distance of 580 miles, in twenty-two days, a march which has always been regarded as one of the most notable achievements during the Mutiny. No sooner had they arrived than the Cavalry, under Lieut. Kennedy, was in action, putting to flight 150 of the enemy's horsemen. It was during this small skirmish that the heroic Quentin Batty, the pride of the Border, the beau ideal of a soldier and horseman, fell mortally wounded, murmuring '*Dulce et decorum est pro patriâ mori !*' On June 9, when every available bayonet was engaged in front of the camp, a large body of the enemy was observed moving round under cover to the rear, and a small force of two guns and the Guides Cavalry were despatched to meet them ; the enemy, observing their weakness and the absence of Infantry, closed on them in such numbers that Daly was ordered to charge, to save the situation ; this he did in splendid style, but himself was wounded in the left shoulder by a bullet which crippled his arm for life.

As it was of the most vital importance that the enemy in Kishnganj should be held in check while the storming column were making good the ground they had won inside the city, the Guides Cavalry under Captain Sandford were employed with the 9th Lancers for the purpose of making a demonstration. That these horsemen should have sat unmoved for two long hours under so fierce a hurricane of lead and iron was a feat of heroic endurance and elicited the remark from the Brigadier : 'They stand like the Lancers.'

Later, under Lieutenant Kennedy, together with the Carabineers, they came upon the enemy near Nanoul; the rebels, after discharging a few harmless shots, advanced their Cavalry on the plains, but were charged and cut up to a man. Having cleared their front the Guides, who were on the extreme right, wheeled to the left, charged, and took the enemy's guns. In this affair they and their commanding officer (who was wounded in the left hand) greatly distinguished themselves. On December 18, 1857, the Guides commenced their return journey to the frontier and reached Mardan on February 11, 1858, spending a week in Peshawur *en route*, where a *feu de joie* and a salute of 21 guns welcomed their arrival, after which the G.O.C. Peshawur Division, General Cotton, addressed the Corps in the following words—

‘ Captain Daly, officers and men of the Guides Corps, I have invited you here this day on your return from Delhi to acknowledge in the most public manner the high sense we entertain of the value and importance of the services rendered by you to the State during the progress of the present insurrectionary war. We respect, we honour you, and we feel proud of being associated with men whose deeds of daring have earned our noble profession undying fame.’

During the time the Cavalry were before Delhi, three British Officers and twenty-eight rank and file were killed, and three British Officers and forty-nine rank and file were wounded. Five Native Officers and thirteen rank and file of the Cavalry were awarded the Order of Merit for conspicuous gallantry in the field.

Soon after the Corps had arrived back in Mardan one more troop was added to the Cavalry.

In January 1876 the Cavalry were ordered to Lahore to form the escort of His Royal Highness the Prince of Wales. In March of the same year the honour of ‘Queen's Own’ was conferred by Her Majesty on the Corps, and H.R.H. the Prince of Wales was appointed Honorary Colonel.

In 1878 the Guides took part in the Afghan war and the

Cavalry, on April 2, were hotly engaged in an action near Fattehabad, where they charged the enemy in brilliant fashion against great odds, but had to mourn the loss of Wigram Battye, who was leading the charge, early in the fight. Lieutenant Hamilton after the death of his C.O. took command and pursued the bands of bloodthirsty and fanatical Afghan Ghazis for some distance, cutting up numbers. Lieutenant Hamilton earned the V.C. in this action and one Ressaldar and five rank and file received the Order of Merit for conspicuous gallantry. The casualties were one British Officer, one Native Officer, and two rank and file killed, and two Native Officers and twenty-six rank and file wounded.

In Major Wigram Battye the regiment lost an officer of whom any army would have been proud; a noble and chivalrous character, beloved by all ranks.

On June 26, 1879, a detachment of the Corps, *i.e.*, twenty-five all ranks Cavalry, fifty-two all ranks Infantry, under Lieutenant W. R. P. Hamilton, with Surgeon A. H. Kelly, marched to Kabul as escort to the Kabul Envoy—Major Sir Louis Cavignari. On September 8 of the same year practically the whole escort, together with the Envoy, were brutally and treacherously massacred, but not till they had despatched some 600 of the Afghans after a twelve hours' heroic fight. In this four sorties from the Fortress Bala Hissar, in which they were quartered, each led by the gallant Hamilton, were made, and finally Jemadar Jiwand Singh, of the Cavalry, with the last remaining few, after fighting staunchly, died to a man. A National Memorial was raised at Mardan to these heroes, and on it is written: 'The annals of no Army and no Regiment can show a brighter record of devoted bravery than has been achieved by this small band of Guides.'

Consequent on the massacre at Kabul a second campaign in Afghanistan took place, in which the Guides Cavalry took part, but with the exception of a successful charge made by Lieut.-Colonel Stewart in the vicinity of Sherpur, were never very seriously engaged.

During the early part of 1887 a third squadron was raised which was composed of a half-squadron Sikhs, and a half-squadron Punjabi Mussulmans, and the composition from that date till now has remained the same, namely :—

One squadron made up of Yusafzai Pathans, Afridis, Farsiwans, and Khuttahs.

Half-squadron made up of Dogras, Khattri, Sikhs, and Brahmins.

The above presumably were the original three troops or half-squadrons.

One squadron Jat Sikhs.

Half-squadron Punjabi Mussulmans.

The Guides Cavalry, under Captain R. B. Adams,* took part in the relief of Chitral, and during the fight, after the capture of the Malakand, when the enemy were severely pressing the Dogras, Lieutenant Baldwin, who was dismounted at the time with some fifty sowars awaiting orders, saw his chance, mounted the men, drew sword, and in a trice was off and among the enemy. The execution done was considerable, but the moral effect of the charge of this little body of men among the Swatis was still greater, for they dispersed hurriedly in all directions. It was after this that the Cavalry were given lances as an additional weapon.

In 1897 the Cavalry, under Colonel Adams, were the first to render assistance to the beleaguered garrison at Malakand, and it was during the third night of the attack that Lieutenant Hector Maclean, of the regiment, was severely wounded in the cheek while looking over the parapet in search of a sniper who had crept up under it. This gallant officer, rapidly recovering from his wound, took part in the further advance into the Upper Swat Valley, being mortally wounded on August 17 while endeavouring to assist Colonel Adams and Lieutenant Lord Fincastle (who was at the time attached for duty) to bring

* Now Major-General R. B. Adams, C.B., V.C., A.D.C.

Lieutenant Greaves, who had been badly wounded, under cover. All the three officers were awarded the V.C. for their valour on this occasion.

Later on, in the Mamund Valley, during this expedition the Guides Cavalry gave valuable assistance on the left flank of the Infantry Brigade during the attack on Agra Gat, by holding a line across the valley among stony, terraced ground with a lot of scrub and low trees, with dismounted fire, and thereby preventing the enemy from getting across and attacking the left of the Infantry. Again, during the retirement from Badelai in the above Valley, the mounted branch of the Corps demonstrated the great value of 'Cavalry dismounted action' during a retreat.

This was the last occasion up to the present time in which the Guides Cavalry have been employed in the field.

The Corps has at present a commandant, assisted by two seconds in command, who command the two branches respectively; these have their adjutants and quartermasters like other regiments. In former days there was only one adjutant for the whole Corps, and all officers were interchangeable between the two branches; but the higher requirements of the present day render this system unworkable.

Officers, however, on first appointment to the Corps can be posted to either branch according to the judgment of the commandant with the sanction of the G.O.C., and can be transferred from one branch to another till they become squadron or double-company commanders. In the late Mohmund expedition, when the Infantry of the Corps only were employed, sanction was given to bring them up to strength by attaching officers from the Cavalry branch, an excellent concession from every point of view, and one which, it is hoped, will always be adhered to.



ORGANISATION OF THE STRATEGICAL CAVALRY

COMMUNICATED BY THE GENERAL STAFF, *War Office*

THE normal organisation of our Cavalry, in common with that of the rest of our forces, is calculated to meet the requirements of the campaign that will allow least time for preparation on the outbreak of hostilities; that is to say, a war with a first-class European Power. We have therefore to confine ourselves to the forces immediately available in the United Kingdom.

After providing for divisional and protective duties in such a campaign, there remain for use as the instrument of strategical reconnaissance in the hand of the Commander-in-Chief, twelve Cavalry regiments, a total of thirty-six squadrons—with the necessary complement of horse artillery and engineers.

The first question that arises is whether this force is too large to be devoted to a single purpose and commanded by one man. To this question both past and present experience answer emphatically No. Seydlitz led thirty-eight squadrons to victory at Rossbach. (Vide Appendix A.) At Leuthen Frederick's Cavalry was grouped in three masses, each of from forty to fifty squadrons, and each mass attacked successfully during the day. (Vide Appendix B.) At Eylau, Murat, at the crisis of the battle, personally led forward four divisions and the Guards Cavalry—a mass of seventy to eighty squadrons. A century later we see Sheridan, in the Wilderness campaign, at the head of a Cavalry corps numbering over 10,000 sabres, organised as shown in Appendix C. Stuart, his great rival, had under his direct command in the previous year a Cavalry division of five brigades, numbering over 9,500 sabres. More recently still, in the advance on Kimberley from Modder River, General French's division comprised three brigades of Cavalry and two of Mounted Infantry—a total of over 9,000 sabres and rifles.

Continental opinion of to-day endorses the teaching of the past, and both France and Germany contemplate the employment of two or three Cavalry divisions—that is, a mass of from forty-eight to seventy-two squadrons—under one leader.

It is evident, therefore, that the force of Cavalry with which we have to deal is by no means too large to be entrusted to one commander. The next question to consider is the best internal organisation of this force.

This organisation must admit of the force being employed tactically to the best advantage and must afford the greatest possible facilities for its control by the commander. The most decisive tactical success will be obtained by skilful combination of fire, shock, and surprise. For this to be achieved, all means of fire must be under the immediate command of the supreme leader. Therefore, in whatever way the squadrons or regiments are grouped the guns must be outside any subordinate organisation and handled as a separate unit by the commander of the whole force.

Having provided for the right control of supporting fire, the formation in which the actual Cavalry attack is launched must be considered. To-day the principles are practically the same as they were in the time of Frederick the Great. The attack is delivered with the centre of gravity towards the front. The organisation should accordingly permit of about half the total force being employed for the main attack, while it should be possible to support it without having to break up subordinate commands, taking into account also the detachment required for protective and reconnoitring duties in the earlier phases.

For reasons of expediency our regiments have at present only three squadrons instead of the four with which continental regiments take the field. Even so, our squadron is barely equal in strength to the French and is weaker than the German one. A British brigade must therefore comprise three regiments in order to compare equally with the two-regiment brigade of France or Germany.

The strategical Cavalry is accordingly grouped in the first instance in four brigades of three regiments each.

Will any useful purpose be served by further grouping these brigades in two divisions of two brigades each?

To answer this question it is necessary to examine in more detail the various phases of the encounter with the enemy's main Cavalry force.

In the earlier phases information regarding the hostile masses and concealment of one's own dispositions, in order to reap the full advantage of surprise in the attack, are the most important considerations. The necessary detachments for tactical reconnaissance and protection of the force in its advance can usually be found by one brigade—the greater part of which may at first be employed for this purpose. In order that the main body, i.e. the remaining three brigades and the guns, may make the fullest use of the ground for the purposes of concealment, it will often be necessary for it to march in two, three, or even more bodies. Nothing is to be gained, therefore, in this stage by an organisation in two divisions, as even the division which was not finding the reconnoitring and protective detachments would often have to be split up in order to take advantage of cover, while if the ground admitted of the main body approaching in one mass, it could do so as easily under the orders of one commander as if there were two subordinate divisional leaders. Indeed the absence of the two divisional staffs is all in favour of concealment, for the presence of a force is more often than not betrayed by the unmistakable appearance of its staff, while the force itself is yet unseen.

Passing now to the actual attack, the principles outlined in paragraph 4 will be secured by a formation with two brigades for the main attack, one brigade as

support, and as much of the fourth brigade in reserve as has been reconcentrated during the final stages of the approach. Much depends on the attack being delivered at the right moment. The supreme commander will, therefore, as a rule personally guide the advance of the troops intended to make the main attack, and will decide the direction of and the moment for their deployment and for launching them to the attack. Once the final direction is given and the charge begins, the function of higher leadership is confined to the use of whatever body is still in reserve—and the control of the fractions already committed becomes a matter for the initiative of brigade, regimental, and even squadron leaders.

In this, the culminating phase, therefore, there appears no room for two divisional commanders. The last instructions of the supreme commander can be given more quickly and with less chance of error, direct to the brigadiers than through two divisional staffs, while the personal magnetism which should be the attribute of a great Cavalry leader—the influence of which, subtle though it be, is too valuable to be disregarded—can thus, at the supreme moment, be more vividly communicated to his subordinates.

In all phases of the tactical encounter it will thus be seen that the single division of four brigades fulfils the requirements of elasticity and adaptability to varying circumstances better than an organisation in two divisions.

There remains for consideration the aspect of control during the phase of operations succeeding the Cavalry fight, when, for the accomplishment of its task, a certain degree of dispersion may be advisable for the strategical Cavalry. Here again elasticity and facilities for making detachments of various strength are the chief qualities to be desired. The interpolation of divisional staffs between brigades and Cavalry headquarters will not appreciably lighten the work of staff duties, while it will be rather prejudicial than otherwise to the rapid transmission of information from the front. Provided that the Horse Artillery, Engineers, and administrative services are so organised as to permit of the necessary portions being readily detached to individual brigades, thus making the latter self-contained in every respect, the maximum of elasticity will have been attained.

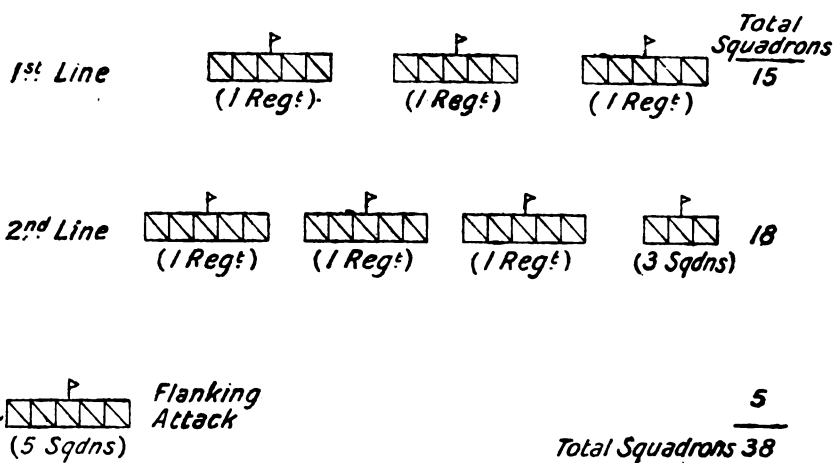
A further reason for not dividing our main force of Cavalry into two equal divisions is that in any European campaign the divisions of our expeditionary force will probably be grouped in two or more armies, one of which, at least, may require a certain amount of Army Cavalry attached to it if operating as a detachment from the main group. As it would be desirable in such a case that the Cavalry force retained by the supreme Commander-in-Chief should be as strong as possible, it is unreasonable to suppose that half the total force available would be detached with the subordinate command. One of the two divisions would consequently have to be broken up, and both divisional commanders would become superfluous from the outset.

APPENDIX A

ROSSBACH

November 5, 1757

Organisation and disposition of the Prussian Cavalry under Seydlitz at the moment of attack.



N.B.—Seydlitz led the 2nd line himself. No brigade organisation.

APPENDIX B

LEUTHEN

December 5, 1757

Order of battle of Prussian Cavalry

	Regiment	No. of Squadrons
With Advanced Guard: Prince Eugen v. Wurtemberg	Ziethen Hussars	10
	Werner „	10
	Warnery „	6
	Seydlitz „	4
	Wurtemberg Dragoons	5
	Szekely Hussars	5
	Puttkamer „	10
	Total	50

ORGANISATION OF STRATEGICAL CAVALRY 233

Right Wing : von Ziethen	1st line	v. Lentulus	Gardes du Korps . . .	3
			Gens d'armes . . .	5
		v. Schmettau	Seydlitz Cuirassiers . .	5
	2nd line	v. Schönaich	Margrave Fredk. Cuirassiers	5
			Schönaich Cuirassiers .	5
		v. Szettritz	Normann Dragoons . .	5
		v. Krockow, jr.	Szettritz „ . .	5
			Krockow „ . .	5
			Steckhow „ . .	5
				<hr/> Total 43

Left Wing : von Driesen	1st line	{	v. Krockow, sen.	{	Krockow Cuirassiers . . .	5
				{	Carabiniers . . .	5
		{	v. Normann	{	Driesen Cuirassiers . . .	5
				{	Bayreuth Dragoons . . .	10
	2nd line	{	v. Meier	{	Kyau Cuirassiers . . .	5
				{	Schönaich „ . . .	5
		{	v. Bredow	{	Gessler „ . . .	5
{						
Total						40

Each body of Cavalry attacked successfully during the course of the day.

(1) The advanced guard Cavalry defeated the Austrian right, west of Borne. The main attack was delivered with thirty squadrons of hussars supported by an enveloping attack of five squadrons on the enemy's right flank. In rear of the main attack followed fifteen squadrons of dragoons and hussars.

(2) After the flank march of the Prussian Army, across the Austrian front, Ziethen with the Cavalry of the right wing reinforced by the Ziethen Hussars co-operated in the attack on the enemy's left. His fifty-three squadrons were disposed with twenty-three in first line, twenty in second, and the ten squadrons of Ziethen Hussars as reserve, but, owing to the difficult nature of the ground, the original formation was soon lost and the fight developed according to the individual initiative of brigade and regimental leaders.

(3) Late in the afternoon the Austrian Cavalry, a mass of more than seventy squadrons under Lucchese and Serbelloni, endeavoured to deliver a counter-attack on the victorious Prussian Infantry. This attempt was defeated by the Cavalry of the left wing under von Driesen, who, observing the threatened attack from his concealed position behind the Sophienberg, took the enemy's Cavalry by surprise. His main attack was made with twenty-five squadrons of Cuirassiers and Dragoons, in support followed fifteen squadrons of Cuirassiers, while ten squadrons of Hussars detached from the advanced guard formed the reserve. The main attack caught the enemy full in flank, while the reserve lapped round and took them in rear. At the same moment thirty squadrons of the Advanced Guard under Prince Eugen von Wurtemberg joined in on von Driesen's right, striking the enemy in front. The latter, surprised, surrounded, and outnumbered, fled in hopeless confusion.

APPENDIX C

Organisation of the Cavalry Corps under Sheridan

May 5, 1864

1st Division : Torbert	1st Brigade : Custer	{	1st Michigan Cavalry
			5th " "
			6th " "
	2nd Brigade : Devin	{	7th " "
			4th New York Cavalry
			6th " "
			9th " "
			17th Pennsylvania "
	Reserve Brigade : Wesley Merritt	{	19th New York "
			6th Pennsylvania Cavalry
			1st United States "
			2nd " "
			5th " "
2nd Division : David Gregg	1st Brigade : Davies, jr.	{	1st Massachusetts Cavalry
			1st New Jersey "
			6th Ohio "
			1st Pennsylvania "
	2nd Brigade : Irvin Gregg	{	1st Maine "
			10th New York "
			2nd Pennsylvania "
			4th " "
			8th " "
			16th " "
3rd Division : J. H. Wilson	1st Brigade : Bryan	{	1st Connecticut Cavalry
			2nd New York "
			5th " "
			18th Pennsylvania "
	2nd Brigade : Chapman	{	3rd Indiana "
			8th New York "
			1st Vermont "

Cavalry of the Army of the James

Cavalry Division : Kautz	1st Brigade : Mix	{	1st District Columbia Cavalry
			3rd New York "
	2nd Brigade : Spear	{	5th Pennsylvania "
			11th " "

Unattached

1st New York Mounted Rifles
 1st United States Coloured Cavalry
 2nd United States Cavalry

PROBLEM No. 7

RESULT

ONLY three solutions were received, of which Lieut. G. G. Sadler's, 3rd Dragoon Guards, is very much the best : it is well thought out and generally sound, and the prize of a night-marching compass has been sent to him.

The following is the Editor's solution of the Problem.

An indication is given in 'Cavalry Training,' Chapter VIII, Section 163, as to the handling of a party detailed to carry out a requisition, and all other information necessary for the solution of this problem is given in the 'Field Service Pocket Book' :—

Requisition Form	.	.	.	.	.	page 56
Notes on Supplies	.	.	.	.	.	pages 151-2
&c. &c.						

In view of possible interference by the rebels in the Pewsey Vale, surprise and rapidity are essential to the success of the enterprise.

With a full moon, marching across the Downs at night to avoid habitations presents no difficulty, and arriving at Tilshead at 5 A.M., picqueting the exits of the village and seizing the telegraph to prevent the escape of information, Major Jones will have time to collect what he requires and get well on his way back to Wilton before the Pewsey rebels hear anything about him.

(a) Major Jones realising that the fewer people are aware of his intentions the better, merely warns his squadron to parade at midnight thus :—

'The squadron will parade complete at 1 A.M. to-morrow in marching order ; tea and sugar, half ration of cooked meat and biscuit, and 5 lb. of corn will be carried by each man. Horses will be fed at 11.30 to-night, and supper will be provided for the men.

'The regimental machine guns (on pack-saddles) will accompany the squadron.
'Signed, JONES (*Major*).

'Dictated to orderly sergeants : 6.30 P.M.'

At the same time he sends his best subaltern, Smith, with one orderly to Steeple Langford, warning the commanders of the posts on the way, and thence to reconnoitre the road *vid* Yarnbury Castle to Breach Hill with a view to his guiding the squadron along it at night ; and he warns his captain, Robinson, to have requisition forms and the detail of what is required all ready, as upon him and the S.Q.M.S. will devolve the duty of actually collecting the supplies.

Only three people in the squadron know the secret, and Jones has a good dinner and a few hours' sleep.

(b) Before mounting at midnight, Jones assembles his officers, sergeant-majors, and sergeants in his quarters, and explains to them on the map his intention as follows:—

‘We are going to requisition Tilshead at dawn—I propose to march *vid* Yarnbury Castle and Breach Hill. Mr. Smith’s troop will head the column, finding an advanced guard of one section about 150 yards in front, which Mr. Smith will lead in person—the machine guns will follow the squadron; there will be no flanking detachments, as they’ll only get lost.

‘On arrival at Tilshead Lodge the squadron will halt, and Mr. Smith’s troop will go on with Captain Robinson and the S.Q.M.S., seize the telegraph office and disconnect the instruments, occupy all the exits from the village, and call out the police constable and other heads of the village.

‘I will take Nos. 2, 3 and 4 Troops and the machine guns to a suitable point on the spur north of the village, and arrange for the protection of the requisitioning party.

‘As soon as the supplies are collected we shall return *vid* Maddington and Stapleford.

‘Of course there will be no lights struck, smoking, or talking on the march, and remember to keep well closed up.

‘Captain Robinson and the rear troop leader will see that there is no straggling.’

(c) Having arrived at Tilshead, the arrangements indicated above are carried out.

Mr. Smith’s troop finds four posts (half a section each) at the exits; the remaining two sections are available for keeping order and enforcing the requisition.

The village police sergeant gives Captain Robinson the necessary information, and orders are given for the collection of the supplies.

Meanwhile Smith’s troop feed their horses and have breakfast, getting boiling water from the nearest cottages.

Major Jones sends out three standing patrols (one N.C.O. plus two men):—

- (a) To St. Joan & Gores Cross,
- (b) To New Farm,
- (c) To Ell Barrow,

and dismounts the remainder of his three troops with the machine guns in a hollow half a mile north of Tilshead, with a double sentry on the ridge above, sending them to water half a troop at a time at the inn, feeding and having breakfast.

(d) The form of receipt used is that given on p. 56, ‘Field Service Pocket Book.’ Receipts are given by Captain Robinson to each individual from whom supplies have been collected, and wagons, carts, and horses hired.

The total amount of supplies for which receipts are given is as follows:—

Flour for 2,271 (say 2,500) men for three days at 1 lb. per diem = 7,500 lb. or 27 sacks.

Fresh meat, beef on the hoof (preferred to sheep as they travel faster) for 2,500 at $1\frac{1}{2}$ lb. for three days = 9,375 lb. = 19 bullocks, calculated to give 500 lb. dead meat each.

Oats for 2,359 horses, at 12 lb. for three days = 86,400 lb.

Hay for 2,359 horses, at 12 lb. for three days = 86,400 lb., = 1,550 trusses

But only six wagons remain after loading up the flour and oats, so only 20,160 lb. of hay are taken, that is at 60 trusses per wagon, which is their utmost capacity in bulk.

Captain Robinson would be fortunate in finding even that amount already cut and trussed, which is a long business; the country is full of hay, as he saw on his way out, and it could be got nearer the lines of communication.

(e) Tabulated form showing length, composition, and contents of convoy :—

No. of Vehicles	No. of Animals	Description	Contents	Total weight carried	Weight carried in each vehicle	Road space
—	19	Bullocks	—	Giving 9,500 lb. dressed meat	—	Say 40 yards
10	40 horses	Wagons (4-horse)	Corn (in sacks)	45,000 lb.	About 4,000 lb.	154 yards
6	24 horses	Ditto	Hay (in trusses)	20,160 lb.	About 3,360 lb. = 60 trusses.	90 yards
15	15 horses	Carts (1-horse)	Corn (in sacks)	25,500 lb.	About 1,700 lb.	150 yards
15	15 horses	Spring carts	Ditto	15,900 lb.	About 1,000 lb.	150 yards
5	5 horses	Carts (1-horse)	Flour (in sacks)	7,500 lb.	About 1,500 lb.	50 yards

Total road space = 634 yards.

(f) The best road for the convoy is *via* Maddington and Stapleford.

When the convoy is collected at the southern exit from Tilshead, No. 2 Troop is withdrawn from the hollow north of the village, and forms the advanced guard and immediate escort to the convoy.

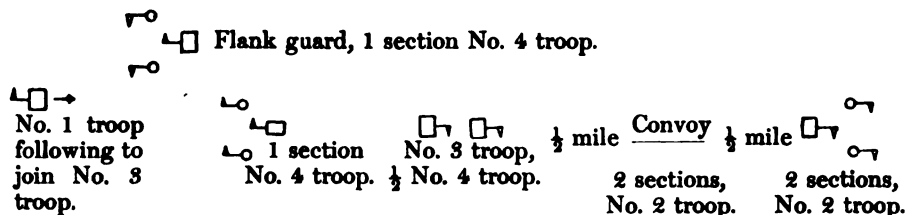
Nos. 3 and 4 Troops and the machine guns follow at a quarter of a mile distance, the standing patrols at New Copse and St. Joan & Gores Cross joining them.

The standing patrol at Ell Barrow is picked up by a flanking patrol (its own section), sent out to move by East Down to the Urchfont-Salisbury road, along which it will move into Wilton, communicating with Major Jones from the Bustard and Longbarrow cross-roads.

No. 1 Troop (Lieut. Smith's) will remain in occupation of Tilshead for one hour after the departure of the convoy, when it will trot on and join the rear-guard.

Two of the leading inhabitants are taken with the convoy as hostages, and will return with the empty wagons when released.

Order of march :—



W. H. BIRKBECK, Colonel.
EDITOR, *Cavalry Journal*.

RECENT PUBLICATIONS

‘Offence not Defence, or Armies and Fleets.’ By Captain C. Holmes Wilson, Royal Field Artillery. Price 3s. 6d. net. Crown 8vo. Publisher, George Allen.

This volume contains a thoughtful and well reasoned appeal to the patriotism and good sense of the British people to set their house in order, and see that their power of offence for defence is adequate.

The power of a fleet does not extend to the land, and no *decisive* blow can be struck without an army.

Passive defence is doomed to failure; success is won by the concentration of force at the *decisive* point, wherever that point may be.

An all-powerful fleet gives the power of active defence only if an adequate national army be available to strike at the *decisive* point.

In two interesting chapters the author traces the fall of Carthage to the neglect by her people of military service, the employment of mercenaries instead of the best native blood and bone of Carthage, and the absence of an adequate army to give effect to the success of the fleet.

Then, after pointing out the offensive spirit of Edward III's defence of England by his invasion of France and the campaigns of Crecy and Poitiers; commenting carefully on the threatened invasions of England by the Spanish Armada, and of Ireland by the French in the eighteenth century; and noting the effects of the initial failure of the British Fleet at the commencement of the Napoleonic wars, we are taken to the present situation, and the parallel of the money-grubbing merchants of Carthage is again driven home.

We commend this work to all thinking English readers.

‘The Evolution of Modern Germany.’ By W. H. Dawson. Fisher Unwin. 21s.

An army reflects the characteristics of the nation it represents, and of no people is this so true as of the Germans. If, then, English officers seek, as they must, to understand German military methods, and the working of the German military mind, they should make themselves acquainted with the outline of the German national development of the last fifty years—and Mr. Dawson's book should find a place in every mess library.

The author is a well-known authority on German questions, and has already published many important works on German life and systems; there is nothing too technical or insuperably dry in this work, it is pleasantly readable by the merest amateur throughout, and its perusal leaves on the mind a complete picture of the gradual transformation of German national sentiments and ideals, and of that ‘cult of force,’ that passion for the offensive which dominates the German mind in strategy and in diplomacy, as well as commerce, and before

which the vacillation and the love of compromise and temporary expedients, which distinguish the party politician, must go down as chaff before the wind.

‘National Independence, or a Commonsense Policy.’ By Francis Francis Constable & Co. Price 6d.

The author sees clearly the breakers ahead, and puts down in forcible language the course he would have us steer.

The more this pamphlet is read by sane Englishmen the better.

‘Memoir of the Life and Military Services of Viscount Lake. By Colonel Hugh Pearse. William Blackwood and Sons.

This is, indeed, a volume of absorbing interest from beginning to end, and one which we can strongly recommend to our readers.

Unlike some biographies it does not consist of quotations from diaries and Lake’s personal experiences, but the author has clearly and concisely set forth the general situation and political events leading up to the various campaigns in which Lake took part; while the maps illustrating these campaigns have the merit of not being too complicated.

Lake’s half century of military service commenced in 1758 when he was not yet fourteen, and at a time when England had already been for two years engaged in what is known as the Seven Years’ War. In 1760 he embarked with his regiment, the First Foot Guards, for Germany, arriving at the front just after the battle of Warburg, where the British Cavalry Brigade, led by Lord Granby in person, covered itself with glory. While serving in this campaign under leaders like Prince Ferdinand and Lord Granby, Lake, doubtless, learnt valuable lessons which he was able to turn to good account in the future.

Next came a brief experience in the last four months of the American War of Independence; followed in 1793 by service in Holland with the Allies against France. Here Lake had his first independent command in action, and the Guards Brigade, which he led at Lincelles, greatly distinguished itself.

After serving in Ireland during the Rebellion, he became in 1800 Commander-in-Chief in India, an appointment which, as the author states, gave him the opportunity of showing that he had mastered the secret of success in war—the one rule to which there is no exception—the superiority of activity over inaction—of the attack over the defence.

Now followed a period of incessant hard fighting where Lake’s qualities as a leader stood him in good stead, earning the admiration and devotion of those who served under him, Europeans and natives alike. Though at the commencement of the Maratha War his force was accompanied by followers to the scale of ten to each fighting man, and each European soldier was provided with a charpoy, as a protection against fever, these ‘luxuries’ did not long survive; and, when at the beginning of 1806 a treaty was finally signed by Holkar, Lake’s army had experienced as much severe fighting and hardship as falls to the lot of any. Amongst the forts captured were Gwalior, Delhi, Agra, and Dig. Great feats these indeed, but unfortunately Bhartpur, the last one attacked before the close of the war, still held out after four desperate assaults.

However, Lake never encountered defeat in the field, and the actions he fought clearly illustrate the value of boldness, especially against natives. In his

case also the value of the personal factor was most marked, for, though it is no longer possible for the supreme commander to personally lead first his Cavalry and then his Infantry into action as did Lake at Laswari—when, by the way, the Infantry went into action after covering 65 miles in forty-eight hours!—victories in the face of difficulties and odds that seem overpowering are unlikely if the commander does not possess the confidence and veneration of his troops.

Lake's services played no small part in the creation of our Indian Empire, and it was only fitting that he should have been rewarded with a peerage and the title of Lord Lake of Delhi and Laswari.

'Sir Redvers H. Buller, V.C.' By W. Jerrold. Dalton. 2s. 6d.

One of the 'Leaders of Men' series, this volume gives a popular account of the life and campaigns of this distinguished soldier, than whom no one was more admired and loved by those who served under his command.

'German Official Account of the Russo-Japanese War.' (The Yalu). Authorised translation by Karl von Donat, with six maps. Hugh Rees. 10s. 6d.

This is a translation of the second of the series of monographs dealing with the war in Manchuria prepared by the German General Staff.

Unfortunately for English readers the translation of the first, dealing with Port Arthur, has not yet appeared.

The volume deals with the events leading up to the war, and the organisation and professional views of the opponents, and gives the narrative of the operations by land and sea up to and including the battle of the Yalu.

English readers will possibly find some difficulty in identifying the names on the maps, as the German method of transliteration of the Chinese names differs from our own.

No student of this, the most recent of modern campaigns, should fail to include this work in his reading, for the views of the German General Staff have a special value in that the Japanese Army is modelled on purely German lines.

'The Russo-Japanese War, 1904.' By Captain F. R. Sedgwick, R.F.A. Swan, Sonnenschein & Co., Ltd., London. 5s. net.

The 'Special Campaign Series' forms a valuable addition to our military literature, and has already proved of immense help to British student officers.

No. 10 of the series, dealing with the Russo-Japanese War, gives a brief, clear, and concise outline of events up to but excluding the battle of Liaoyang, together with tactical and strategical comments.

It is in fact a summary of all the information at present available and contained in our own and the German General Staff histories, as well as in the best of the unofficial books and magazine articles.

The maps are clear, and the work is quite the most complete of its kind we have yet had the good fortune to read.

'The Franco-German War.' July 15 to August 18, 1870. By Dr. T. M. Maguire. Clowes & Son. 4s. net.

Dr. Maguire's personality is well known throughout the British Army. This, his latest effort, marked by all the eloquence and charm of style so peculiarly his

own, will be welcomed by students of the period he deals with, and especially by regimental officers who are reading it for examination.

'Anglo-French Horsemanship.' By John Swire, M.F.H.

This excellent little book must be of the greatest interest and help to all students of the art of horsemanship. Mr. Swire's work is the outcome of a thorough study and considerable experience of the French and English methods of horse-training.

The first chapter deals with the 'selection of a horse.' The diagrams are excellent in showing relative proportions, but the question of angles, into which Mr. Swire goes rather deeply, is somewhat too intricate for the ordinary purchaser, though interesting to an expert.

The third chapter, on the seat, legs, and spurs, should be carefully read. The following remark on the use of the spurs is very true, 'When punishing with the spurs, the rider must consider the sensibility of the horse and not the gravity of the fault committed or his own feelings of anger.' This chapter is full of useful hints to those whose duty it is to train men to ride.

The fourth chapter, which is the best in the book, cannot be too closely studied by those who wish to improve their hands and riding. It is all excellent and has been most carefully compiled.

In the fifth chapter, on 'training a horse,' Mr. Swire constantly refers to the works of Fillis and Baucher, and seems to have chosen the best out of them. This, combined with his own personal experiences, makes a very valuable and interesting chapter.

The last chapter deals with high-school exercises, especially the Spanish walk, as useful gymnastics for well-trained horses, and explains how to attain them.

There is much in the book that will be useful to Cavalry officers in training their horses and teaching their men, and the fact that it is written by a master of foxhounds will go far to prove that the methods advocated in it are intensely practical.

'In Morocco with General D'Amade.' By Reginald Rankin. Longmans, Green & Co. Price 9s.

This book gives a clear and interesting account of the operations under General D'Amade from January to March, 1908, as well as a great deal of valuable information concerning the conduct, tactics, and organisation of the French Expeditionary Force.

On August 5, 1907, the massacres of Casablanca commenced, and though a considerable French force was soon available, the conduct of operations by General Drude, which were mainly of a defensive nature, did little to pacify the surrounding districts.

On the assumption of command by General D'Amade (of whom the author entertains the highest opinion) a more vigorous policy was at once adopted.

The staff work was excellent, and for the French troops too the author is full of admiration. For example, at dawn on January 14 a force of nearly 4,000 men left Casablanca for Ber Rechid; thence after a few hours' halt it started at 11 P.M. for Settât, fought a successful action, captured the town, and returned to Ber Rechid, arriving at 1 A.M. on the 16th. The distance as the crow flies was

forty miles, most of it over heavy plough, and the last twenty-six hours' marching was almost continuous.

The book is charmingly written, gives a straightforward narrative of the military operations, as well as a clear summary of the political situation, and is of special interest to English officers to whom service in uncivilised countries is so familiar.

'The Frontiersman's Pocket-Book.' John Murray. 5s.

Very nicely got up like a pocket-bible, this text-book of the Legion of Frontiersmen contains a vast amount of useful practical information, put down by men who have themselves lived in the wilds and learnt by experience the value of the methods they advocate.

Path-finding, trapping, cooking, transport, and doctoring in the absence of professional aid, as well as a host of other questions, are dealt with by experts, and the little volume cannot fail to be of value to the Army at large as well as to the Legionaries for whom it is written.

'The Whitehall Series of Military Maps.' Forster, Groom & Co., Ltd. 2s. 6d.

Demand creates supply, and Messrs. Forster, Groom & Co.'s latest sketch map to illustrate the Franco-Prussian War of 1870, with its envelope of coloured flags, and its clear and compressed summary of the organisation of the opposing forces and their movements, is sure to be of enormous assistance to officers preparing for examination for promotion in May and December.

'Some Notes on the Service for Young Officers and others.' By Major G. R. Talbot. Price 6d. net. Forster, Groom & Co.

A useful little book, containing a great deal of useful elementary information.

'Tactical Questions and Answers on Cavalry Training, 1907.' By Captain H. R. Gall. Price 2s. 6d. net. Forster, Groom & Co.

Though we cannot approve of the method of instruction by question and answer, which some call 'cramming,' Captain Gall's little book is complete and correct.

'The Semaphore Alphabet made Easy.' By Captain H. R. V. D. Hardinge, Indian Army. Price 6d. net. Forster, Groom & Co.

This pamphlet is all it claims to be.

'The German Army and British Army Organisation (Territorial).' By Captain A. H. Trapmann. Forster, Groom & Co. 4d.

A clear tabulated statement.

'Handbook for Drivers of the Mounted Services.' By an Adjutant. Gale & Polden. Price 4d.

A very useful and complete little book for men in charge of wagons and horses of regimental transport as well as for the Army Service Corps, for whom it is written.

'Why I should join the Territorial Forces of my Country.' By 'V. D.' Gale & Polden. 1s. per dozen, 7s. per 100.

The success of the modern methods of recruiting for the Territorial Army is unquestionable, and this pamphlet will therefore be of use.

Among the most important of the Regimental Histories recently published is 'The Story of the Household Cavalry,' by Sir George Arthur (Constable), of which we hope to give a detailed review in our next number.

The Aldershot Military Society's publications can be obtained from Hugh Rees, 119 Pall Mall, price 6d. each, and include among others of recent date :—

'Peace Strategy' and 'The Future of Army Organisation.' By Lieut.-Colonel A. C. Repington, C.M.G.

'Fire Fighting.' By Lieut.-Colonel MacMahon, Chief Instructor at Hythe.

The Pioneer Press of Allahabad has commenced the publication of a weekly vernacular paper called the *Fauji Akhbar*, or Army newspaper, which should exercise a very beneficial influence upon the Indian Army.

'Topographical Surveying and Sketching.' By Major Thomas H. Rees, Corps of Engineers, United States Army. Ketcheson Printing Company, Leavenworth, Kansas.

This is an elaborately compiled volume of some 400 pages, and has been adopted for use in the United States Army Service Schools at Fort Leavenworth, Kansas; also by the United States War Department as the official text-book. The price being \$2.50.

Though doubtless of value for the instruction of those who intend to make surveying their profession, the work is to our mind too complicated and full of technical terms for use by the average officer, who, after all, principally requires to be able to read a map accurately and show the natural features of the ground on a sketch. Our present manual of sketching certainly enables him to learn how to do these and many other useful things in addition, while its price is considerably less.

'Ueber Verlauf und Ergebnis von Reiterzusammenstoessen.' By Lieut.-Colonel Wenninger, 1st Bavarian Cavalry. Vienna, 1909. Price 1 kr. 50 h.

The contents of this small pamphlet, described by the author as 'an open letter to all who have taken part in the Cavalry fight,' first appeared in serial form in the Austrian Cavalry Journal, and herein Colonel Wenninger considers the various circumstances under which Cavalry may meet Cavalry in the charge, illustrating what he has to say on the subject by examples taken from the great Cavalry combat round the village of Stresetiz in the war of 1866 and that at Vionville-Mars-la-Tour. The author complains that the German Cavalry regulations—and for that matter the generally accepted idea of the Cavalry charge—do not appear to consider that two opposing Cavalry bodies ever meet, or are likely to meet, except in the full shock of the charge—each riding resolutely home against the other. Further, it is declared that only by thus riding *home* can the adversary be ridden *down* and the victor retain his efficiency for further effort. Col. Wenninger sets out to prove that these are regulation fallacies, and he enumerates four other circumstances under which contact of Cavalry with Cavalry is very much more likely to occur, and gives instances of these from the actions above mentioned. These are : (1) A thoroughly prepared body charging one taken at a disadvantage ; (2) two bodies, whose charge is broken up by deep ground, slacken pace and enter upon a mere *melée* ; (3) one body avoids the other's attack and goes about ;

(4) one of two bodies engaged in a *melée* is charged by a third. In regard to the regulation and popular idea of the Cavalry charge, the author maintains that given two bodies of equal weight, man for man and horse for horse, what must happen will be this: the two bodies will meet and individual men and horses will be piled one above another, like carriages in a railway accident, the second rank will add to the struggling heap, and only individual men and horses will emerge therefrom—under no circumstances, in such a case, can there be any question of victor and vanquished, of a *melée*, or of the victor who retains his efficiency and readiness for further effort. From the examples he gives from the Cavalry fights about Stresetiz in 1866 the author deduces the following: That where two Cavalry bodies are engaged already in the *melée* it is useless for a reinforcing Cavalry to join in by a frontal attack; that the success of the charge can only be cemented by a flank attack or by one upon the enemy's rear, and that for this reason it is even better that a supporting body should be placed in *echelon* of the flanks of the first line, and, best of all, that the main strength of the first line should not, as heretofore, be used for the frontal attack in the charge, but for the covering of its own and for the attacking of the opposing flanks. From the lessons of Vionville he urges that at drill and manœuvres Cavalry bodies should invariably break up after the charge, instead of merely halting, and that the *melée* should be practised, when the men should be taught rapidly to assemble in any desired formation ready to be led against a new foe. Colonel Wenninger is all for fire action under certain circumstances in the pursuit: he insists, however, upon the charge being executed *beschlossen*—except against a flying enemy—even upon wearied horses; and both he and General von Pelet-Narbonne appear to anticipate material advantage from such *Beschlossenheit* when German Cavalry meets French horsemen, to whom a certain extension of front is permitted by regulation during the execution of the charge.

'Sixty Years of the Austro-Hungarian Cavalry (1848-1908).' Published by the *Artilleristische Monatshefte*. Sold by Karl Konegen, Z. Opernring, Vienna-5s. 2d.

This book is not a work of military history, but describes the gradual development of the Austrian Cavalry.

For this purpose it is divided into five periods.

In the first period, 1848-49, the Cavalry, some 40,000 in number, was divided into Cuirassiers, Dragoons, Light Horse, Hussars, and Uhlans (Lancers). Each had its own drill, and a distinct line was drawn between the functions of heavy and light Cavalry. Heavy Cavalry regiments had three, Light Cavalry two, squadrons each, with a reserve squadron in war time. Men served for eight years, and were obtained by local conscription.

During the second period, 1850-59, the Cavalry was undergoing a period of organisation consequent on the war of 1848-49. The strength of the Heavy Cavalry was increased, and the Light Horse were converted into Uhlans. Yeomanry and irregular corps were also formed. Carbines were issued to all but Uhlans. The Cavalry of 1859 was well trained and well mounted, the horses being mostly Hungarians, with a good deal of Arab blood.

The third period, 1860-66, saw the Cavalry reduced by nearly half, it being considered that Cavalry could not face Infantry armed with the new rifle, and

would only be required for reconnoitring purposes. Collective action and shock tactics were consequently neglected. Up to the battle of Koeniggratz the Heavy Cavalry was always held in reserve, but after that date it performed the same duties as Light Cavalry.

The fourth period, 1867-81, was one of far-reaching reforms. Liability to service was extended to all classes. All regiments were organised alike, namely, with six squadrons and a *dépôt*, and in war time a reserve squadron was added. All regiments were armed with breech-loading carbines, and dismounted fire training was thoroughly carried out.

The Cavalry regulations of 1870 and 1875 provided for the employment of large bodies of Cavalry acting independently in front of the Army.

The fifth period, 1882-1908, has not been remarkable for any radical changes. Five Cavalry Divisions have been formed, and greater attention has been paid to means of communication, but the organisation remains much the same. The present strength of the Cavalry is 293 service squadrons, or 48,000 men.

'Tendances Actuelles de la Cavalerie Allemande.' By Major Niessel, French General Staff. Lavauzelle, 10 Rue Danton, Paris.

In four chapters—(i) Strategic; (ii) Tactical; (iii) Shock; (iv) Fire—the author deals exhaustively with Germany's views on the use of Cavalry as set forth in the Regulations and in the writings of her recognised authorities, Generals von Bernhardi, von Kleist, von Pelet-Narbonne, and others.

That the principles laid down in our own Cavalry Training, 1907, so exactly conform to German opinion makes the study all the more interesting and useful to English officers.

Kavalleristische Monatshefte.—Colonel Buxbaum has an article in the November number on the 'War Training of Cavalry.' He starts from the standpoint that neither rider nor horse has any real inclination to charge home against other bodies, that unconsciously the rider checks his steed, and the horse his pace at the actual moment of impact, and that, while the man can be trained to overcome his nerves by the effort of his will, the horse is outside any such educational impulse. Colonel Buxbaum then proceeds to show how man and horse may best be trained to overcome their enemies in battle, but the training suggested would appear after all to be rather physical than mental, and one cannot avoid a suspicion that the writer has rather lost sight of the premise from which he started. Then follows a particularly full and clear account of the forcing of the Pass of Samosierra on November 30, 1808, by the Polish Lancers of the Imperial Guard—surely one of the most remarkable feats that Cavalry have ever performed; the account, which is illustrated by a plan, is compiled from Balagny's 'History of the War in Spain,' from narratives of survivors of the Lancers and from the records of the regiment, and is particularly well worth reading. Colonel Wenninger contributes an account of the Cavalry action at Ville-sur-Yron in the Franco-German war, and discusses the work and results achieved by the individual regiments and squadrons engaged. The French military papers have before complained of the tone of some of the criticisms of General von Pelet-Narbonne, and in his paper on 'The vain attempts of the French to fill their ranks' he 'rubs in' a moral which is none the less unpleasant because its truth is

indisputable. He discusses the proposed introduction of universal service in the French colonies of North Africa, and seems to think that France will not for some years to come be able to draw thence any large reinforcements; he meets the obvious suggestion that, if the strength of the French Army must annually sink below that of Germany, the latter Power might well reduce her armaments, by pointing out that Germany has to guard at least two frontiers. This number contains the reports in brief of three officers who took part in the long-distance ride of 1908 from Buda-Pest to Vienna.

The January number is not to hand. An important contribution to the issue for February is the paper by Major von Lerch of the General Staff, wherein is discussed to what extent the effective action of Cavalry will in the future be influenced by their armament with better fire-arms and by the addition of machine-gun detachments. The writer reminds us that while in Manchuria opposing Cavalry invariably dismounted and sought a decisive issue in the fire-fight only, in future wars the mounted attack and the fire-fight must go hand in hand when Cavalry meets Cavalry. In the attack on Infantry the presence of machine-gun detachments will make up for the comparative weakness of the Cavalry firing line, and the dismounted Cavalry must learn to impart to their work on foot the same elements of surprise and dash hitherto only looked for in the mounted attack. Infantry, says Major von Lerch, can only be brought to a halt by a real attack, not by the mere threat of one. The writer's views in regard to the Cavalry attack upon guns are worth quoting. After pointing out that the present disposition to keep guns well to the rear and in covered positions renders them get-at-able by Cavalry only and by no other arm, one must surmise that he intends the horse is to be used merely for a *means of approach*, for he says that 'the most effective method against Artillery is the surprise attack by fire and *not* mounted.' Colonel Buxbaum bewails the decline of the art of riding—a decline, he declares, to be noticeable in all armies—and suggests the establishment of special schools, where picked officers should learn all that pertains not only to riding, but to the teaching of the art. Colonel Buxbaum would seem to be an enthusiast on this subject, for he had a paper of a similar character in a recent number. Count Wrangel has an article on the use of the lunge in the breaking of remounts, and Lieut.-Colonel von Hellingrath writes on the employment of the Divisional Cavalry, whose work, he contends, is almost more than they can well accomplish with the force at their disposal.

Militär-Wochenblatt.—The pages of this journal have during the past three months been almost devoid of any articles concerning Cavalry. In the number dated January 23 Imhoff Pasha describes a ride undertaken from Adrianople to Stamboul in which three officers and seven rank-and-file took part. The object of the ride was to execute a reconnaissance, to test the endurance of the untrained Anatolian horses, and to compare them with Hungarian mounts upon which a similar test was to be made from Stamboul. The horses were in field service order and all were over eleven years; the weight carried by each was 46 lb., exclusive of rider, carbine, and sword, the latter carried on the saddle. The horses were so small that the end of the scabbard hung within less than a foot of the ground. The weather was bad and the 'roads' almost non-existent, especially in the mountains, and the distance, which was about 154 miles, was

covered in 53½ hours, including halts, or 33½ hours actually on the road. The horses were examined on arrival and found to be in excellent condition. The average weight of the three officers was 12 st. 8 lb., and one of the three—the junior subaltern—weighed just under 15 st. He belongs to a regiment of Light Cavalry.

Revue de Cavalerie.—The November number opens with a discussion on the work of the French Cavalry in the manœuvres held last year, and the writer—Colonel Aubier—pleads that such operations as therein took place should be considered not as mere peace manœuvres, but rather under the imaginary environment of active service conditions. He divides his subject under three heads—*exploration stratégique*, *emploi tactique*, and *la poursuite*—and expresses some surprise and regret that the widely different composition of the mounted forces on either side, and the comparatively minor rôle played by the more purely Cavalry body, should have led some critics to revert to the views expressed as to the future employment of this arm after the experiences of the wars in South Africa and in the Far East. The country operated over last autumn was quite unsuited for the employment of large Cavalry bodies, but none the less the two Cavalry Divisions allotted to the one side *were* able to find out all they wanted about the movements of the opposing army, though unable—purely because the conditions were those of peace—to ensure the *aveuglement* of the enemy, who, acquainted beforehand with the strength of its opponent, and kept aware through the daily papers of all that had happened during the previous day, had consequently nothing left to find out but what was happening between sunrise, when the operations began, and mid-day, when they automatically ceased. The test instituted in these manœuvres between the *cavalerie d'exploration* and the *détachements de découverte* proves nothing, since, says Colonel Aubier, nothing can be conclusive under peace conditions—all that can be perceived are certain general indications. The writer gives some instances of Cavalry work in the war of 1805 and in that in Manchuria so far as it related to *couverture* and *aveuglement*, which by so mobile an arm as Cavalry are best attained by alternate menace and attack. Writing on the tactical employment of Cavalry in peace manœuvres, the writer reminds us that by the majority of the critics the charge of the Cuirassier Division on September 15 was considered to have failed, and to have had little more than a spectacular value, whereas, Colonel Aubier points out, not only were the horsemen concealed from view until within 300 or 400 yards of their objective, but the Infantry whom they attacked had been marching since daybreak, had been for two hours engaged with opposing Infantry, and were at the time of the charge under a heavy fire from the horse batteries of the Cuirassier Division. At manœuvres the physical and mental strain *des champs de bataille*, which makes of Infantry an easier prey for Cavalry, is rarely or never taken into account.

The pursuit—where the Cavalry could and should be of such enormous service—can never be even simulated in peace manœuvres, since when this should commence it is time for the troops to entrain for their quarters. *Il faut donc*, says Colonel Aubier in conclusion, *se dégager des fictions de manœuvre et envisager les réalités de guerre.*

In this number 'La patrouille de Cavalerie' is continued, and though of a certain interest and value, is perhaps rather elementary for its surroundings. The

war in Morocco promises to be interesting when the narrative reaches more modern times, but we note that for the future, owing to the provisions of the Law of 1905 reducing the period of army service to two years, it will be impossible to make use of the purely local or French Army for colonial expeditions.

In the December number the opening article appears to be a plea from the Cavalry to be left alone—above all not to be reduced in order that the Artillery may be augmented. This is followed by one upon the 'Cavalry Fire-fight,' wherein the writer enters into the discussion raised by General de Négrier, and continued in the *Revue Hebdomadaire*, on the dismounted action of Cavalry in particular and the general limitations of the employment of that arm induced by the introduction of the two-year period of army service. 'La campagne de Maroc' is continued, as are the articles by Henri Choppin on distinguished French cavalymen, and the number closes with a paper on Artillery remounts, contributed to both by General Langlois and Colonel Sainte-Chapelle, wherein the one maintains and the other denies the deterioration of Artillery remounts due to the existing regulation whereby the same type of remount is held equally suitable for Artillery and medium Cavalry.

No inconsiderable portion of the January number of the *Revue de Cavalerie* is taken up with a translation of General von Bernhardt's book on 'Cavalry in Future Wars,' already sufficiently well known to British Cavalry officers from the translation of that work by Mr. C. S. Goldman, published in 1907 by Mr. John Murray. Then follows what appears to be the first instalments of the records of the Moroccan warfare of the early eighties, and more particularly of the operations in Oran against Bou-Amama, the firebrand of the insurrection of 1881. It is a type of the warfare to which our soldiers are accustomed on the marches of our Empire, and readers will doubtless draw what comfort they may from the reflection that in a war of detachments against a mobile and enterprising enemy 'regrettable incidents' are not always to be avoided, and that, moreover, they exercise no real influence on the final results of such warfare. The 'Lettres d'un Dragon' are continued in this number, and, while in the first of the series he seemed to be entering a plea that the Cavalry should be left in peace, it seems now that, as is the way with reformers, he would have no objection to change provided it be such as he himself recommends. 'Dragon' complains of the too cut-and-dried organisation of the French Cavalry units, and fears that the tendency is rather to pre-judge events and so run the risk of the organisation not being suitable to the possible needs of the moment. He would have certain units of Cavalry permanently assigned to the service of the *protection immédiate*, and proposes that the remainder of this arm should be grouped in divisions for instructional purposes, such divisions, on the outbreak of war, being placed at the disposition of the army commanders. In discussing the question of Cavalry effectives in peace and war, 'Dragon' insists upon the need for an increased proportion of re-engaged men—amounting, it would appear, to at least one hundred per regiment.

Spectateur Militaire.—In the back numbers of this fortnightly for the last quarter there is not much of Cavalry interest to be discovered, but in that dated December 1, General Lamiroux relates an episode of Gravelotte which will well repay perusal; it describes how, as an Infantry subaltern with a company detailed

for the occupation of a farm near Bruville on August 16, he was a witness of many of the Cavalry charges which took place in the valley below his position. In remarking on the initiative taken in this battle by the German General von Alvensleben, General Lamiraux points out the restrictions placed on that of the French commanders; he had drawn the attention of his own superior to the manner in which some German horsemen, advancing to the charge, might be taken in flank by a body of Infantry pushed forward from the farm. The French officer, having been ordered 'to remain at the farm,' did not dare to take the steps suggested, the importance of which he recognised, without reference to his superior, who, naturally ignorant of the exact situation, merely returned a formal order not to leave the farm. Lamiraux, however, ventured on to the ground covered by some of the charges he had witnessed, and remarks that nearly all the casualties he there saw were men killed by 'the point.' Extracts from the journals of a Colonel d'Eslon give the experiences of the unfortunate French prisoners resulting from the capitulation of Baylen, who appear to have been shipped from one place to another—from the Canaries to Majorca, thence to Gibraltar, and finally to England, where d'Eslon remained in captivity until 1811. Lieutenant Brial, of the 4th Chasseurs d'Afrique, continues '*Le travail en bridon*,' wherein he endeavours to explain how the recruit may be made himself to realise the use of and the manner of applying the different 'aids.' The whole treatise is naturally somewhat elementary, but appears devised to arouse the interest and awaken the intelligence of the recruit.

Lieutenant Brial's paper concludes in the number dated February 1.

The following books of interest and value have been received and will be reviewed in the next issue :—

'The County Lieutenancies and the Army.' By Hon. J. W. Fortescue, M.V.O. (MacMillan & Co.) This book was written at Mr. Haldane's request, and will be specially valuable as well as interesting to the Territorial Army.

'Grant's Campaigns. The Wilderness and Cold Harbour.' By C. F. Atkinson. 466 pp. 8vo. 24 maps sketch and maps. 7s. 6d. (Hugh Rees.)

'The True Story of Andersonville Prison.' By J. M. Page and M. J. Haley. 8s. (The Neale Publishing Co., New York).

'Four Years under Marse Robert.' By Major Robert Stiles. Third edition. 8s. (The Neale Publishing Co., New York).

EDITORIAL NOTES

THE CAVALRY JOURNAL COMMITTEE

GENERAL SIR J. D. P. FRENCH, G.C.V.O., K.C.B., K.C.M.G., Inspector-General of the Forces, has shown his special interest in the Arm in which his regimental life was spent, by accepting the Chairmanship of the Committee of Management of the CAVALRY JOURNAL.

THE WASTAGE OF CAVALRY HORSES IN THE AMERICAN
CIVIL WAR, 1861-5

We are indebted to Colonel J. E. Edmonds, R.E. (General Staff), for the following note, which tends to prove, if proof be wanting after our own experiences in South Africa, how exceedingly expensive is the upkeep of improvised mounted troops in war.

Lieut. Rhodes (6th Cavalry), in his 'History of the Cavalry of the Army of the Potomac,' states that during the first two years of the war 284,000 horses were furnished to the Cavalry 'when the maximum number of Cavalrymen in the field at any time during the period never exceeded 60,000.' The average number must have been very considerably less, for at the outbreak of war there were only five mounted regiments in the regular army, all much under strength.

In the appeals which President Lincoln made to the nation in April and May 1861 for 117,000 men, he only asked for one regiment of Cavalry, and for no more until August, when one company of Cavalry (100 men) was accepted for every regiment of Infantry (1,000 men).^{*} There were only seven companies of Cavalry present at the battle of Bull Run on July 21, 1861.

In August 1862 General Pope reported there were not more than 500 Cavalrymen fit for service out of a paper strength of 4,000.

In October 1862 McClellan reported that the number of men mounted in the army of Virginia came to less than a good-sized regiment.

If therefore the average is taken at 30,000, which is probably very much in excess of actual fact, the consumption is $4\frac{1}{2}$ horses per man per annum, without taking into account the large number of horses requisitioned from rebels and captured.

General de Chanal, the French military attaché with the Federal Army, in his interesting book, '*L'Armée Américaine pendant la Guerre de la Sécession*,' published in 1872, gives the following statistics extracted from reports of the Secretary for War, with regard to the loss of horses in the Army of the Potomac in the year 1863.

The thirty-six Cavalry regiments of that Army had, during the six months May to October, an effective strength which varied from 10,000 to 14,000. They required the following remounts:

^{*} General McClellan, however, states that the Cavalry available never exceeded one-twentieth ($\frac{1}{20}$ th) of the Infantry.

May	5,673 horses
June	6,327 „
July	4,716 „
August	5,499 „
September	5,829 „
October	7,336 „

Total 35,380 horses

This works out to 3 horses per man in the six months, or six per annum.*

It should be added that during this period the Cavalry captured very nearly 12,000 horses from the enemy, and used them as remounts.

No doubt a large proportion of these must have been captured after the battle of Gettysburg, at the beginning of July, for the smallest total of horses drawn from the depots occurs in that month.

General de Chanal attributes the heavy loss partly to raids, during which the horses had to cover immense distances at a rapid pace, often without water or suitable forage; but mainly to the small amount of care which the inexperienced Northern troopers gave to their mounts.

Lieut. Rhodes also attributes it partly to the raids, but also to the ignorance of purchasing officers as to the proper animals for Cavalry service, to the poor horsemanship of the raw troopers mustered in at the beginning of the war, and to the control of the Cavalry movements by officers of other arms, ignorant of the limit of endurance of Cavalry horses.

General Meigs, the Quartermaster-General, however, in an official report ('Official Records,' Series I. Vol. XIX. Part I. Pp. 19-20), offers other and more familiar causes. He says the demand for horses was so great that in many cases they were carried off and put to service before they had recovered sufficiently from the fatigue incident to a long railway journey. They were left in the train for long periods, in one case fifty hours, without forage or water, and on being taken out were issued and used for immediate service. 'The exigencies of the service, or perhaps carelessness and ignorance, put them to a test which no horses could bear.'

It is only fair to mention that, in addition to the ordinary ills to which horses are subject, it is said that the soil of Virginia seemed to be particularly productive of diseases of the feet. One disease resembling foot-rot, according to Lieut. Rhodes,† disabled thousands of horses in fine condition in one day's march. From Virginia the disease was conveyed to the remount dépôt near Washington.

Various measures were taken to reduce the enormous wastage, such as—

1. Monthly inspections and classification of the horses in four categories :

- (a) Unfit for service.
- (b) Useless for Cavalry, but fit for draught horses.
- (c) Likely to be fit after rest.
- (d) Fit for service.

* This seems to have been the usual rate of the Army of the Potomac, as 13,000 Cavalry horses were supplied to it between September 1 and October 25, 1862 (Quartermaster-General's report October 25, 1862).

† According to Colonel Ingall (McClellan's aide-de-camp) it attacked hoof and tongue.

2. Monthly reports showing the work done since last inspection, the number of miles marched, the quantity of forage distributed, and the water consumed.

On the strength of these statistics, officers considered to have been guilty of negligence were removed from the army, while soldiers were transferred to the Infantry.

These measures proving insufficient, it was ordered, in April, 1864, that Cavalry regiments without sufficient horses to take the field should be employed as Infantry (they had in the early years of the war returned quietly to the peace of the depôts to be refitted), and that the horses of partially mounted regiments should be handed over to those that had the strongest effectives—a new application of the text: 'To him that hath shall be given, and from him that hath not shall be taken away even that which he seemeth to have.'

The remount department, which was under the Quartermaster-General, naturally came in for much of the blame. In July, 1863, the provision of horses for the Cavalry was taken out of its hands, and a special Cavalry Bureau formed under a Cavalry General* as Inspector General and ten senior Cavalry officers as Inspectors.

The Quartermaster-General's officers had bought from contractors, who delivered the horses at the regimental depôts or where they were required; and the new department organised two great depôts at Giesboro Point, near Washington, and St. Louis, to hold 10,000 to 12,000 horses each, and about twenty smaller depôts to hold 3,000 to 4,000 horses. It also endeavoured, by purchasing direct from breeders and owners, to save the dealers' profit, which proved to be no economy, as the price of horses rose rapidly. Generally the Bureau does not seem to have given satisfaction, for in April, 1864, after an existence of nine months, it was directed to hand back the purchase, inspection, subsistence and transportation of horses to the Quartermaster-General, and return was made to the previous system.

There were 6,000,000 horses in the United States, according to census in 1860.

Finding immature horses liable to distemper and disease, officers were 'generally instructed to buy no horses under six years of age' ('Quartermaster-General's Report,' October 21, 1862).

CHINESE REMOUNT ESTABLISHMENTS

From the following notes communicated by the General Staff, and made by Lieut.-Colonel Pereira, Grenadier Guards, on the Chinese Remount and Breeding Establishment at Shan-tien-ho, 200 miles N.W. of Peking and 45 miles S.W. of La-ma-miao, the great market for Mongolian ponies, it would appear that the Chinese Government is fully alive to the necessity of providing a supply of horses for Cavalry in war.

Some 200 years ago the then Emperor established two Remount Depôts near La-ma-miao, which were supplied and indifferently managed by arrangement with the Mongol tribes.

The numbers at one time reached 20,000 ponies at each depôt; but little interest was taken, in their care and the results were unsatisfactory till, in 1905, Yüan Shih-kai, Viceroy of Chih-li, took the matter in hand.

* The first was General Stoneman; he was followed by Generals Gerard and J. H. Wilson.

He decided to start an establishment on a more systematic basis, and sent a Brigadier-General to La-ma-miao as chief director. Shan-tien-ho was selected as the site for the Yamens of the officials (below the Director) connected with the establishment.

The Staff consists of—

- 1 Officer in charge.
- 1 Secretary.
- 1 A.D.C.
- 2 Veterinary Officers.
- 2 Remount Officers (who travel over the region and inspect the herds).
- 1 Officer for keeping the Horse-register.
- 2 Clerks.
- 10 Orderlies.

At this particular establishment (Shan-tien-ho) there were in July 1908 altogether over 2,000 ponies, divided into five herds, viz. four herds of Mongol and one herd of Ili ponies. A herd is nominally 360 ponies, but in reality most of these particular herds are over 400 strong, for at present there are in all about 100 stallions, 1,000 mares, and over 1,000 geldings, cut when they are four years old.

Each herd is looked after by two officers, one clerk, and six soldiers from the northern provinces (Chih-li, Shan-tung, etc.), very good riders.

The five herds are usually out in the country, grazing in the valleys or on the hills, according to the weather. The winter is very severe, and there is usually snow on and off from November to March or April, whilst the frost continues up to May.

Grass is cut in the autumn and brought in to Shan-tien-ho, where the Yamen is surrounded by an outer compound with open sheds, where sick ponies or those used for riding or carts are kept. In very severe weather, or if the snow is deep, the ponies are driven in and fed on cut grass. In May also, when the weather is damp and they have lost their winter coats, they require special care.

At present the five herds at Shan-tien-ho are for the use of the Viceroy of Chih-li, and therefore supply the ponies for the Cavalry and Artillery of the 2nd and 4th Divisions. (N.B.—Officers have to provide their own ponies.) About 1,300 are annually sent down to these two divisions in the month of November, so as to arrive after the crops have been cut. Only geldings from five to seven years old are sent down, and these are selected haphazard from the four Mongol herds.

As these ponies are taken from the herds they are formed into independent droves, 300 strong, and driven off, unshod, by men specially hired for the purpose, to their destinations.

Some 20 per cent. die on the road or soon after arrival, and their Army life is usually only three years, for they are cast at nine.

To replace the 1,300 ponies sent away, another 1,300, bought by Chinese agents at Urga and other places in the north, are sent to Shan-tien-ho. These are usually bought at five or six, never younger.

The average cost of a pony is about £3 (20 taels), but with travelling and other expenses they cost about £4 10s. (30 taels) when delivered in Peking.

If only four or five ponies are wanted, the brigadier at La-ma-miao can buy them on his own authority, but if 100 or more are wanted a memorial must be sent to the Throne.

When stallions and mares are required for the Shan-tien-ho establishment, they are bought at the La-ma-miao market by officers specially selected by the Viceroy, who receives a monthly report giving the total numbers purchased. Mares cost more than stallions as the Mongols do not care to part with the former.

Breeding is absolutely indiscriminate at Shan-tien-ho, the ponies being left entirely to themselves. No trouble is taken to keep special stallions or mares apart, or to identify them by names. More attention, however, is now to be paid to breeding, and special buildings are to be erected.

There is no rule as to the number of stallions or geldings in a herd, but roughly there are ten mares to every stallion.

The Mongols geld their ponies at two years old, and all ponies purchased have been broken in when young.

Each pony in Shan-tien-ho is branded on the hindquarters with the Chinese character 'kuan,' meaning 'official,' whilst on the shoulder it has the number of its herd and age.

Pneumonia is the commonest illness.

Ponies in the open at Shan-tien-ho, of course, cost nothing for keep, whilst riding ponies cost about 9s. (3 taels) a month.

There are no imported European horses. Viceroy Yüan sent up a German mare, but she proved a failure, would not eat the grass, and was eventually sent back to Tientsin.

One of the five herds at Shan-tien-ho is composed entirely of Ili ponies, which form part of a lot of 1,000 bought at Ili, in the far-away north-west of the new dominion, in November 1907. The remaining two herds to complete the 1,000 purchased were due to arrive at Shan-tien-ho in November 1908. All three herds will be kept only for breeding purposes for the next five years, after which five-years-olds will be sent down to the Cavalry and Artillery of the Imperial Army.

The ponies are larger and stronger than the Mongolian ponies, averaging fourteen to fifteen hands, and all of a dark colour.

Lieut.-General R. S. S. Baden-Powell, C.B., sends us the following :

OUR SILLY SADDLE

What was the original intention in making a saddle for the horse's back ?

To help the man in riding the horse, that is, to give him a firm and secure seat such as will enable him to govern his horse with a light hand and to hold his weapon with freedom and confidence.

Does the present military saddle assist the man to do this ?

No ; rather the reverse.

Why is that ?

Because by a process of evolution and fashion the old quilted arm-chair of our ancestors has become a hard, smooth, slippery slab of leather, on which it is difficult for a man to keep his seat till he has developed special muscles and balance by continual practice from boyhood upwards.

Do all Cavalry men, then, begin in boyhood to learn horsemanship ?
 No ; that is why one is surprised to find so many horsemen among them.
 Then all Cavalry men are not ' horsemen ?'
 No, not all, by a fairly protracted calcareous design.
 How do those who are not horsemen manage to ' remain ' ?
 By the able help of the Ordnance Department.
 I do not quite understand you.

The strength of the bits and reins, of the stirrup leathers, and of the spurs and their straps, as issued by the Ordnance, is undeniable.

You mean ? Oh, I see. Then what is the matter with the saddle ?

Not much, but in evolving improved forms the object of the saddle has been entirely lost sight of, that is all. Its appearance, simplicity, economy—and slipperiness, have, however been successfully studied.

What would you have, then ?

Well, a saddle made for the original purpose, namely, to give the rider, even an indifferent one, a firm seat on the horse.

As how ?

Consider the Australian Buck-jumping Saddle, with its great knee-rolls and cantle ; the Texas Cow Boy's Saddle, devoid of flaps, with a pommel and cantle, the Indian Remount Saddle, with cloth-to-cloth friction and knee-rolls ; also consider the value of these combined with numnah flaps and with buckskin or buff leather seats. Use them when you are trying to make horsemen in a few lessons. The novel appearance will of course stick in your gizzard at first, but it will not do so when the eye has become accustomed to it and its practical value is realised. Once this initial difficulty is got over and some such saddle is adopted, you will have reached one method by which the task of making the ordinary recruit into a fairly capable rider or driver will be sensibly reduced, even in the Territorial Force, with the short time available for instruction.

NEW ZEALAND MOUNTED TROOPS

We are indebted to Colonel A. Bauchop for the two pictures of a New Zealand horse jumping a wire fence, opposite page 210.

In a country where no other fences are known, and where the use of wire-cutters is, under peace conditions, unthinkable, such an accomplishment is a necessity.

A fearless horseman, well mounted, full of dash, with a keen eye for country, and accustomed to fend for himself and his horse in the most unlikely places, the New Zealand Mounted Rifleman is a rough and ready soldier of the finest type, and a most valuable asset in the defence of the Empire, as was proved on many a hard-fought South African battle-field.

PRIZE ESSAY FOR 1909

The Council of the Royal United Service Institution has selected the following as the subject of the Military Essay for 1909 :

Data for the Essay—

- (1) The present organisation and strength of the Territorial Force.
- (2) The present approved system of raising the Territorial Force.

- (3) The present system for obtaining and training Officers.
- (4) The present amount of obligatory training.
- (5) The financial basis to be approximately the present Territorial Force Estimates.

Subject of the Essay—

(1) Working from the foregoing data, to offer in full detail suggestions as to the mode of training and preparing, during the periods of instruction, the Officers and Non-Commissioned Officers to become efficient in the arms to which they respectively belong.

(2) Next, the methods in which, by supplementary voluntary work in private time, the Officers and Non-Commissioned Officers can themselves increase their personal efficiency.

(3) Other sources, besides those at present officially recognised, from which a further supply of Officers and Non-Commissioned Officers can be obtained.

The Council of the Royal United Service Institution has awarded the Chesney Gold Medal to the Honourable J. W. Fortescue, M.V.O., in consideration of his valuable military work, 'The History of the British Army.'

A regimental history of the 13th Hussars is in process of compilation, and any information, such as

- (a) Letters, papers, and diaries of those who have served in the regiment;
- (b) Portraits of distinguished officers, particularly that of Colonel Richard Munden, who raised the regiment in 1715; and
- (c) Historical relics,

will be gratefully received by Mr. C. R. B. Barratt, c/o Lieut.-Colonel A. Leetham, Royal United Service Institution, Whitehall, S.W.

MANŒUVRES IN THE TRANSVAAL

Interesting Manœuvres were held in the Transvaal, August, 1908, a Mounted brigade and an Infantry brigade being engaged on either side.

Throughout the operations it was noticed that in dismounted actions the led horses of the Cavalry were frequently left in exposed positions, while at other times neither escorts were told off nor look-out men posted to protect them.

Though as a general rule, to save horseflesh, the Nos. 3 now dismount as well as the Nos. 1, 2 and 4, occasions do arise when it may become necessary to move the led horses to some more sheltered position, and if in such a situation the Nos. 3 are not mounted, confusion is sure to arise when they attempt to mount, while holding four horses, and then to move quickly to another position.

Fault was found that information was not always passed through to the Superior Officer for whom it was meant. However good such information may be, it becomes of little value if not passed quickly. Important messages coming in from the front should be shown to units which the messenger passes *en route*.

A tendency was noticed to become too dependent on the helio. Troops should be practised in passing messages verbally, otherwise information becomes so distorted as to be useless. On several occasions the signallers with both forces

read important messages of their adversaries through carelessness on the part of the senders in not taking cover.

Helios with red mirrors were used to represent the line of fire of guns, and gave capital results, units being at once enabled to recognise that they were under fire. Green mirrors also were tried, but these were not found satisfactory.

Mounted troops were occasionally seen executing lateral movements *close* behind the infantry firing line, where they would be certain to experience loss from 'over' bullets.

It was suggested that there are advantages in always detailing the same unit as escort to the guns, for then the O.C. escort gets thoroughly in touch with the O.C. R.H.A. and understands what is required of him. Several artillery officers preferred a maxim gun detachment as escort rather than Cavalry.

One day a flour ration was issued to each force for the men to make chupatties, but the results were not so good as they ought to have been. As this is a valuable asset for active service it should be generally taught.

Specially organised Field Veterinary Sections and Communication Companies were attached to each force, and were found to work well.

A proposal has been put forward for the former to have with them at the outset a few sound horses, so that men having horses with slight injuries can receive another horse in exchange.

The Communication Companies each consisted of 2 officers, 4 N.C.O.s 12 mounted signallers, 6 dismounted signallers, 6 cyclists, 12 mounted orderlies, 31 horses, 18 mules, 2 pack horses, 1 trolley, 3 Scotch carts, and 1 water cart. These companies should have been exclusively used for communication between Headquarters and Brigadiers or others under the direct command of Headquarters. The Blue Force at one time detached a large number of men from the Mounted Brigade for Divisional Cavalry duties, and thus seriously reduced its fighting strength.

The Horse Artillery and Cavalry horses were in capital condition, and stood the work well. The great improvement in the Mounted Infantry since the war was generally remarked. The men rode well, and were very steady in the ranks.

GERMANY

TERM OF CAVALRY SERVICE

The question of reducing the service of the Cavalry and Horse Artillery from three to two years has now been definitely abandoned.

The reasons put forward in a monograph to the Reichstag are as follows:—

- (i) The squadrons could not mobilise in winter without calling up reservists.
- (ii) The three-years' men are required to train the remounts.
- (iii) The three-year service provides men who are sufficiently good riders to serve in reserve units on half-trained horses.

ESPRIT DE CORPS

The crest of the 73rd Fusilier Regiment (stationed in Hanover) of the German Imperial army affords an interesting instance of the care with which tradition and *esprit de corps* are fostered in the Kaiser's army.

This regiment formed part of the 'King's German Legion,' and took part in the defence of Gibraltar in 1782, under General G. A. Elliot, Lord Heathfield,

and in 1908 still wears, by the Kaiser's order, a ring on the sleeve of the tunic with the word 'Gibraltar' in memory of that gallant service.

It is curious that the motto 'With Elliot Fame and Victory' which surrounds the Rock in this regimental crest, should honor the memory of a Cavalry officer



pure and simple, for Lord Heathfield raised and commanded the 15th Hussars, then the 15th Light Dragoons or Elliot's Horse.

We are indebted for this and many other useful notes to one of Lord Heathfield's descendants—Colonel G. H. Elliot, late 3rd Bengal Cavalry, the founder of the Cavalry Club Library.

OBITUARY

Major-General John Cecil Russell, C.V.O., late colonel 12th Lancers and Equerry to His Majesty the King, died on the 30th ult. at Barton Court, Canterbury, aged sixty-nine. He was the son of the late Mr. A. J. Russell, of Edinburgh, and entered the service in September 1860, being promoted lieutenant in August 1864, captain in May 1870, major in April 1874, lieut.-colonel in November 1879, colonel in February 1884, and major-general in March 1895, retiring in July 1898. He served throughout the second phase of the Ashantee War in 1874 as aide-de-camp to Sir Archibald Alison, and subsequently as Deputy Assistant-Adjutant and Quartermaster-General. He was present at the battle of Amoafu, the attack and capture of Becquah, the battle of Ordahsu, and capture of Coomassie, being twice mentioned in despatches, receiving the medal with clasp, and the brevet of major. During the Kaffir War of 1878-9 he took part in the operations against Sekukuni under Colonel Rowlands. Serving in the Zulu War of 1879 he was present in the engagements of Zlobane Mountain and Kambula, being several times mentioned in despatches and receiving the medal with clasp and the brevet of lieut.-colonel. In 1881 he obtained command of the 12th Lancers and held it for four years, and after two years and a half on half-pay

was appointed commandant of the Cavalry Depôt at Canterbury, a post he held for five years. In 1875 he was appointed Equerry to the then Prince of Wales, a post which he held for three years and only relinquished to go on active service. He continued however to be an Extra Equerry, and on the accession to the throne of His Majesty he was appointed to a similar position at Court. In 1902 he was given the colonelcy of his old regiment, the 12th Lancers, and awarded the C.V.O.

The German Army and the world of equestrian sport have sustained a heavy loss by the death, at the age of 56, of Major-General von Heyden Linden, late Colonel of the 13th King's Uhlans at Hanover, Commander of a Guard Cavalry Brigade at Potsdam, and the most celebrated gentleman rider in all Germany.

Baden-Baden was the scene of most of the General's successes between the flags, but he made one visit to England, winning the December Handicap Steeplechase at Kempton Park in 1887.

The beau ideal of a Cavalry leader, a gentleman and a sportsman, General von Heyden Linden made his mark too in literature, and his accomplished pen was devoted to the improvement of German horse-breeding, especially thoroughbred strains, as well as to the production of several valuable works on horsemanship. It has been well said that, though every first-class horseman cannot be a Cavalry leader, every Cavalry leader must surely be a first-class horseman. The late General certainly was both.

We regret to announce the death of Major J. M. Gordon, late of the 12th Royal Lancers, who died at Liverpool after a short illness, on Sunday, January 17. Born in 1863, Major Gordon was the son of the late Mr. John Taylor Gordon, of Nethermuir, Aberdeenshire. He was educated at Eton, where in 1880, with W. K. Hardacre, he won the School Pulling. He entered the Army in 1884, and joined the 12th Lancers at Bangalore.

Always a keen soldier and a very fine rider across country, whilst he was in the Regiment he won, amongst other races, the following Point-to-points:—

- 1891. Regimental, on 'Campaigner.'
- 1892. Cheshire Light Weight, on 'Lady Thornton.'
- 1892. Cheshire Heavy Weight, on 'Merry Man.'
- 1892. Cheshire Farmers' Race, on 'Dear Me.' (These three races were on the same day).
- 1893. Regimental, on 'Lady Thornton.'
- 1894. Army, on 'McCrankie' (28 starters).
- 1895. Regimental, on 'General Monk.'
- 1895. Cheshire, on 'Peg the Rake.'
- 1896. Army—In England—on 'Peg the Rake.'
- 1896. Army—In Ireland—on 'Peg the Rake.'
- 1896. Dove Valley on 'Peg the Rake.'

He also owned Karakoul, Leybourne, Spinning Meadow, and other winners, and in 1906 was elected a Member of the National Hunt Committee.

He retired from the Army in 1896, but served in the Transvaal War as Adjutant of the 9th Imperial Yeomanry. He was mentioned in despatches, and received the Queen's Medal and three clasps.

At the time of his death he was in the Reserve of Officers, and was second in Command of the Montgomeryshire Yeomanry.

SPORTING NOTES

ROYAL NAVAL AND MILITARY TOURNAMENT

At the Royal Naval and Military Tournament, 1909, to be held at Olympia from May 13 to 29, in addition to the usual Officers' Riding and Jumping Competition, which takes place on *one* day of the Tournament, there will be a Jumping Competition for combatant Officers of the Regular, Special Reserve, and Territorial Forces, for which prizes value £25, £10, and £5 are offered.

This competition will be over a course similar to that to be used at the International Horse Show in London, 1909 (see diagram), and will be held daily throughout the Tournament, except on the day of the usual Officers' Riding and Jumping Competition mentioned above.

There will not be a High Jump Competition at the Royal Naval and Military Tournament, but there will be opportunities for practising for the High Jump Competition at the Horse Show.

Conditions of competition and judging as at the International Horse Show, for Officers' Jumping Competition.

Horses to be Government horses or the property of Officers.

Plain saddles are allowed.

Competitors will compete on two consecutive days, two runs each day, those with the best marks competing in the final on the last day.

The Committee of the Royal Naval and Military Tournament will pay for the conveyance of Officers competing and for one horse and one servant for each Officer to and from Olympia.

Competitors will be informed of the days on which they will compete.

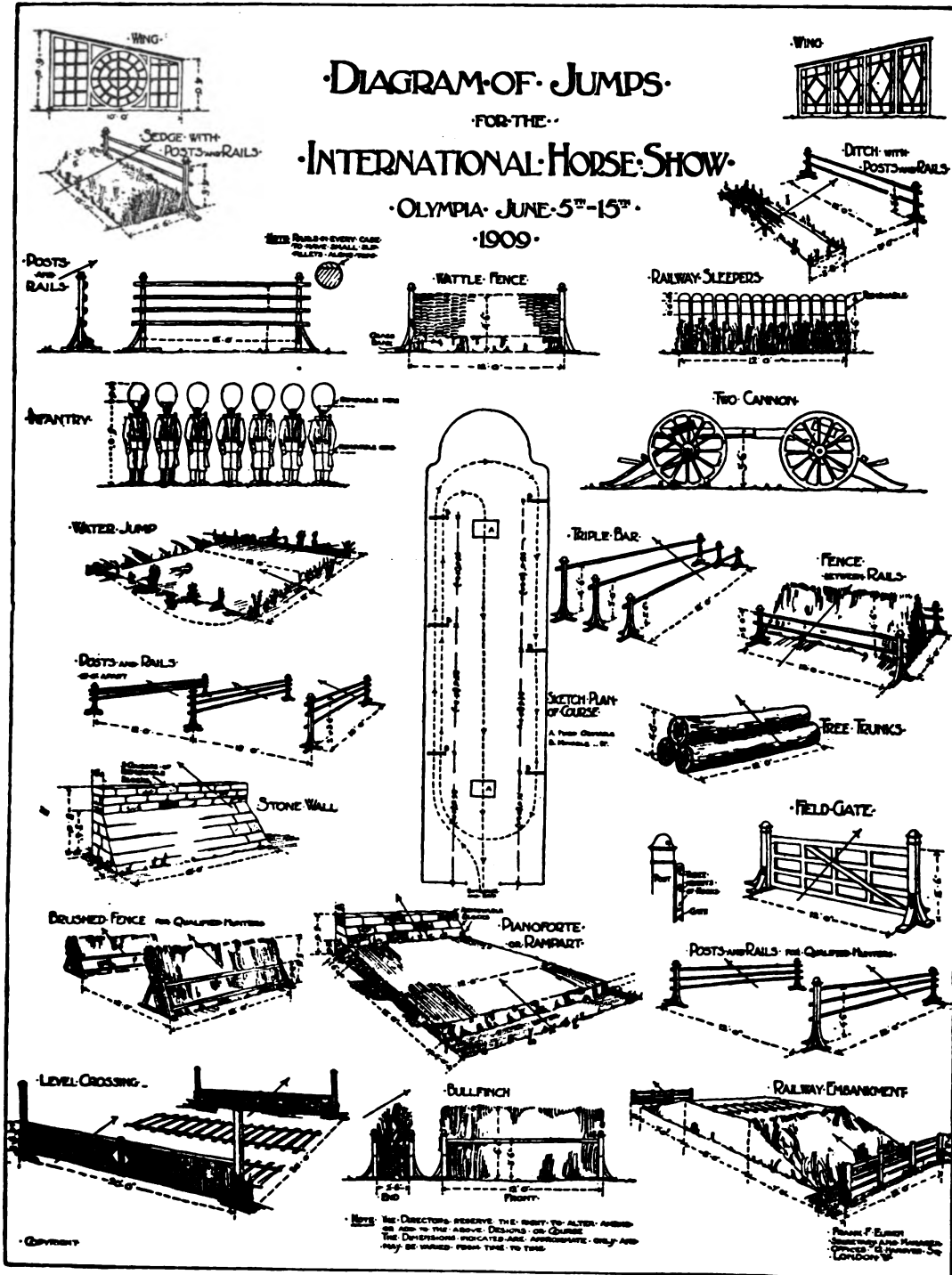
Entries to be sent to the Hon. Secretary, Royal Naval and Military Tournament, on entry forms, which can be had on application to him at 66 Victoria Street, Westminster, S.W., by April 1, 1909.

The Officers' 'skill-at-arms' competitions are on May 25 and 26; *vide* Rules for Royal Naval and Military Tournament, 1909.

INTERNATIONAL HORSE SHOW

The International Horse Show, 1909, will take place at Olympia from June 5 to 15; there will be—

- (a) Officers' charger classes, heavy and light.
- (b) Four open jumping competitions, and a champion cup.
- (c) An International jumping competition for teams of 3 officers, for His Majesty's gold cup.
- (d) A jumping competition for British officers for a gold cup given by H.R.H. the Duke of Connaught.
- (e) A jumping competition for the Territorial Cup.



All details can be obtained from the offices of the International Horse Show, 12, Hanover Square, London, W., after April 1, 1909.

The conditions of jumping competitions are as follows :—

Minimum weight 11 stone

TIME LIMIT

Two minutes, taken from the moment the horse takes off for the first jump to the moment he lands after the last jump.

Uniform to be worn.

MARKS

Refusal or Bolting—

1st time	2 faults
2nd time	3 faults
3rd time	disqualified

The horse, or rider, or both fall	4 faults
Horse touches fence without knocking it down	$\frac{1}{2}$ fault
Horse upsets the fence with fore legs	4 faults
Horse upsets the fence with hind legs	2 faults

The nature of the jumps is shown in the diagram.

At the Buenos Aires Horse Show the four British officers who competed won seven prizes as follows :—

- (i) Parcours de chasse (with time limit): 2nd, Major Hon. Beresford, 7th Hussars; 6th, Lieutenant Brooke, 16th Lancers.
- (ii) Wide Jump: 1st, Second Lieutenant Montefiore, R.A. (7.50 metres); 5th, Lieutenant Brooke, 16th Lancers.
- (iii) Jumping Competition: 3rd, Lieutenant Brooke, 16th Lancers; 4th, Major Hon. Beresford, 7th Hussars.
- (iv) Military Steeplechase: 4th, Captain Bayford, 18th Hussars.

There were six events, and an average of fifty entries for each event. The Argentine entries were very numerous, and other nations represented were Spain and France.

Colonel Godley, who was in charge of the British officers, was a member of the committee of judges.

RACING

Owing to the hard frost the Grand Military meeting at Sandown Park had to be postponed from the beginning to the end of March. This considerably reduced the entries, but, nevertheless, a big success was scored. On the first day in fine weather there was an enormous attendance, but the second day suffered owing to the heavy rain. The Selling Steeplechase was won by Mr. F. C. Stern's Australasia, the owner riding. The much coveted Grand Military Gold Cup of 345 sovereigns, three miles, secured seven starters, and was won by Mr. E. Christie Miller's Sprinkle Me (Mr. C. Banbury riding), with His Majesty's

Bahadur (Mr. O'B. Butler up) second, and Mr. D. McCalmout's Johnstown Lad (owner) third. In this race Mr. J. H. Charters's Ross, most sportingly ridden by his owner, who was suffering from a recent severe fall, started favourite, but, unfortunately, broke down when going well a short way from home. Major J. D. Edwards's Waveen, well ridden by Mr. O'Brien Butler, won the Past and Present Steeplechase, Mr. M. Thorneycroft's Loyal Irish (owner) took the Maiden Hunters' Steeplechase, and Mr. H. A. Brown's Police Trap, magnificently ridden by his owner, secured the Sandown open Hurdle Race by a short head.

On the second day Captain C. E. P. Sankey's Tuppence III, won the Tally Ho Steeplechase, ridden by Mr. V. H. Simon. Fifty yards from the winning post the saddle of Tuppence III slipped right back and then clean round under the horse's belly. It looked as if Mr. Simon must fall on to the enclosure rails but in the most marvellous manner he threw himself on to the horse's neck, and in that position safely passed the winning post. It was a splendid acrobatic performance for which he was heartily cheered. The chief event, the Grand Military Handicap Steeplechase, was a popular victory for the outsider Kennilworth, who was ably ridden by his owner, Captain T. Godman, Captain L. E. G. Oates's Gabriel II. (Mr. J. Charters) was second, and Mr. D. McCalmont's N. B. (owner) third.

The United Service Steeplechase was won by Mr. R. McGillycuddy's Irish Wisdom, Captain R. C. de Crespigny riding, and a Maiden Steeplechase by Mr. D. McCalmont's Varsity, Captain R. C. de Crespigny riding. So ended a most sporting meeting.

The annual meeting of the Household Brigade took place at Hawthorn Hill, and, as usual, attracted a large and aristocratic company, which included many ladies.

On the first day some of the results were :

1st Life Guards' Challenge Cup.—Captain R. Hamilton Stubber's Killester (owner).

Royal Horse Guards' Regimental Race.—Lord Worsley's Beaugard (owner).

The Household Brigade Cup.—Mr. E. Christie Miller's Sprinkle Me (Mr. Banbury).

2nd Life Guards' Regimental Challenge Cup.—Captain Hugh Ashton's Dan Leno II. (owner).

On the second day the results were :

Selling Hurdle Race.—Mr. C. Bewicke's Romer (owner).

Open Selling Steeplechase.—Mr. C. N. Newton's Flax Field (owner).

Hunters' Challenge Cup.—Captain E. H. Brassey's Stag's Eye (owner).

Handicap Steeplechase.—Captain R. C. de Crespigny's Warner (Captain C. de Crespigny).

Farmers' Steeplechase.—Mr. Auckland's Odd Fish (Mr. R. Tennant).

In this race the favourite, ridden by Captain R. C. de Crespigny, turned a somersault at the last fence on his rider, who was knocked out, but recovering remounted, and riding back was abused by a spectator. Captain de Crespigny at once dismounted and gave the offending party a sound and well-deserved thrashing.

RACING ABROAD

At the Johannesburg January meeting His Excellency Sir Hamilton Goold-Adams's Wrought Iron ran a dead heat for the Brokers' Handicap with Mr. Carine's Captive Knight.

The Army Cup at Lucknow brought out a field of nineteen ponies, including one of Lord Kitchener's. Hooded Falcon, owned by Captain M. R. K. Hodgson, 2nd Royal Fusiliers was the winner, with Munshi the property of the same officer, second.

POINT TO POINT RACES

The Household Cavalry held their races near Melton Mowbray, Colonel Walter Peake having mapped out an ideal course of three and a half miles in the Quorn country. Thirteen went to the post for the 1st Life Guards' race, heavy and light weights running together; the former was won by Major B. P. Cookson's Hewitt and the latter by Mr. J. J. Astor's Coptic. There were also thirteen starters for the 2nd Life Guards' race, Captain de Crespigny's Dadford winning the Heavy and Mr. Stratt's Magic III the Light weights. The condition for the Royal Horse Guards' race were catch weights 12 st. 7 lb. and over; eighteen faced the starter and a splendid race resulted in favour of Captain I. Fitzgerald's Tranby.

The Grenadier and Coldstream Guards held their races in the Cottesmore country, Lord Lonsdale making the arrangements. The Grenadiers' race was won by Captain G. Powell's Copper II, and the Coldstreams' race by Mr. C. W. Banbury's Little Queen.

In wet weather and heavy going the Royal Staff College held their meeting near Bracknell. The results were :—

Light-weight Race.—Captain W. Drysdale's (Royal Scots) Glanmire.

Heavy-weight Race. Captain G. N. Cory's (Royal Dublin Fusiliers) Red Peter.

Soldiers' Open Race.—Captain E. B. Ashmore's (Royal Field Artillery) Henrietta. Henrietta won the same event last year, and despite a 14 lb. penalty again scored easily.

The 8th Hussars' races were successfully held near Colchester.

Heavy-weight Race.—Mr. E. B. Houston's Cloghane (owner).

Light-weight Race.—Mr. H. N. M. Clegg's Bentworth II (Mr. Armitage).

Open Race.—Mr. R. C. Taylor's Sportsman (owner).

Chargers' Race.—Mr. E. B. Houston's Scotcher (owner). Fourteen started.

The South Eastern Mounted Brigade Meeting took place over a natural course under the South Downs between Lewes and Plumpton. The Inter-Regimental Race between teams of four representing the East and West Kent, Surrey and Sussex Yeomanry was won by Captain T. P. Goodman's March Brown (owner) one of the Sussex team, Sir R. Filmer's Grunter (the Rev. F. Timmins) being a capital second, and Major the Hon. T. A. Brassey's Mallow (owner) third. The last named represented East and West Kent respectively. The result on points was

a win to Sussex with 38 points, East Kent second with 32 points, West Kent third with 31 points.

Trooper H. L. March's Galloping Major was a popular winner of the Brigade Cup. He rode as a representative of the Surrey Yeomanry.

The Irish Army races were held over a four mile course at Knocklong, Co. Limerick. Results:—

Heavy-weight Race. (For cup presented by Sir N. G. Lyttelton, G.C.B. commanding the forces in Ireland).—Captain A. L. Keogh's (Connaught Rangers) Gold Mohur (owner).

Open Race.—Mr. W. P. Hanly's Ballynonty.

Light-Weight Race. (A cup presented by the Lord Lieutenant).—Captain Preston's (R.F.A.) Yorkshire Relish (Mr. J. Forsyth).

The Shropshire Imperial Yeomanry Race for a Cup given by Colonel Kenyon was run for at the Hunt Steeplechases near Shrewsbury. There were eight starters and it was won by Sergeant C. E. Edwards's Alberta (owner riding.)

The Royal Scots Greys' Regimental Race was competed for at the Beaufort Hunt Meeting and was won by Captain W. Long's Recruit.

The annual Grand Military Races were held in conjunction with the Whaddon Chase and Lord Rothschild's meeting near Leighton Buzzard. The weather was bad but attendance enormous. For the Military Light Weight Race eighteen started, a popular winner being Captain G. Paynter's (Scots Guards) Crecora (owner), Mr. G. W. Dobson's (19th Hussars) Dungannon second, and Captain W. G. Cadogan's (10th Hussars) Royal Monk II. third.

Seventeen started in the Military Welter Race, and Captain E. H. Brassey's (1st Life Guards) Stag's Eye was the winner from Major S. F. Mott's (60th Rifles) Proposition and Lieut. I. W. M. McCowen's (Royal Navy) Kestrel III.

The Queen's Bays' Races were held with the Grafton Hunt and Inter-Varsity Steeplechases. Ten started for the Light Weight Race, which was won by Captain Bradshaw's Tommy (owner), and eight started for the Welter Race, which was won by Captain Ing's Abdul (owner). Lieut.-Colonel Kirk, commanding the regiment, rode a most sporting race, carrying about 16 stone; he would probably have won but for his horse making a bad mistake at the last fence.

The Royal Scots Greys' Races took place near Andover. The Subalterns' Cup was won by Mr. H. Denison Pender's Apache, the Grey Horse Cup by Mr. A. B. Winch's Nell, and the open race by Captain Long's Recruit.

The 5th Lancers' meeting came off on Lord Wenlock's estate near York. The Heavy Weight Cup was won by Captain Maddick's Chiquita (Captain McTaggart riding), and the Light Weight Cup by Major Jardine's Weaver (owner).

The Suffolk Imperial Yeomanry Race was held with the Suffolk Hunt Races, and was won by Mr. R. C. Ridley's Merry Widow (owner).

Thousands of people attended the Kirkham Hunt Races at Bryning, at which the Duke of Lancaster's Own Yeomanry Challenge Cup was won by Major

H. L. Bibby's Pedro (owner), and the Lancashire Hussars' Challenge Cup by Colonel Pilkington's Nemo (H. A. Brownlow).

At the Flint and Denbigh Hunt meeting the Denbighshire Hussars' Regimental Challenge Cup was carried off by Mr. H. Fletcher's Paddy.

The 1st Cavalry Brigade at Aldershot held a successful meeting in the Hampshire country. Results :

3rd Dragoon Guards' Regimental Race.—Captain A. E. Harman's Snapshot (owner). Eight ran.

7th Hussars' Regimental Race.—Lieutenant E. Cross's Tandem (owner).

16th Lancers' Light-weight Race.—Captain Campbell's Playfair (owner).

3rd Dragoon Guards' Subaltern Cup.—Lieutenant H. K. Worthington's Sheila (owner).

7th Hussars' Light-weight Race.—Lieutenant D. H. McCalmont's Spoke (owner).

16th Lancers' Heavy-weight Race.—Captain Campbell's Rethcor (owner).

At the Shorncliffe Drag Hunt the 2nd Cavalry Brigade Race was won by the 21st Lancers' team, Queen's Bays team being second and 11th Hussars' team third.

The Light-weight Race was won by Captain A. B. Pilcher's Rob Roy, and the Heavy-weight Race by Mr. J. G. Lowther's Bert (owner).

The 2nd Cavalry Brigade Race, open to teams of four officers from each unit of the Brigade took place on Saturday, April 3, in conjunction with the Shorncliffe Drag Point to Point Meeting, near Ashford.

A large field of twenty-four turned out to face the starter.

After Captain Ing, Queen's Bays, had led for most of the way, Captain Delmege, 21st Lancers, came to the front on Gazelle, and won a real good race, closely followed by another horse of his, Marvel, ridden by Captain Anderson. Mr. Oldrey, 4th Dragoon Guards, secured third place on Tim. It is noteworthy that nineteen out of the field of twenty-four passed the post within the prescribed two minutes of the leader. The result of the race was as follows :

21st Lancers, 1st with 75 marks : Queen's Bays, 2nd with 59 marks ; 11th Hussars, 3rd with 44 marks ; 4th Dragoon Guards obtained 41 marks ; 'B' Battery, R.H.A. obtained 40 marks ; 3rd Field Troop, R.E. obtained 26 marks.

In the unavoidable absence of Brigadier-General H. D. Fanshawe, C.B., Colonel de Crespigny (late 15th Hussars) kindly undertook the responsible duty of judge.

POLO

Aldershot day at Ranelagh this year has been changed from the usual Thursday to Saturday June 26.

The Hampshire Carabiniers have revived the old Yeomanry Polo Club at Ibsley Camp ; a full-sized ground has been boarded on Flower Down about 1½ mile from Winchester railway station. Captain R. E. Cecil is Hon. Secretary, and it is hoped to commence play early in April.

The Hurlingham recent form list comprises thirty names as against twenty-six in 1908. With the exception of Captian G. Heseltine, who has a Staff appointment in India, all last year's names are included. Major Neil Haig who was formally on the list has been added, and the four new comers are Lord Woodehouse M.P., Captain G. E. Bellville, Captain C. Champion de Crespigny, and Mr. Frank Rich.

Major W. A. Tilney, 17th Lancers, having rejoined his regiment in India, Major S. L. Barry, D.S.O. (late 10th Hussars), has succeeded him as Hon. Secretary of the Army Polo Committee and also as Hon. Secretary of the Inter-regimental Polo Committee.

The first number of *The Polo Monthly*, a well illustrated magazine edited by L. V. L. Simmonds, has just been published and will be welcomed by all interested in polo as supplying a much needed want. Its pages are open to the discussion of polo topics, correspondence being invited, while photographs of club players or ponies will also be welcomed. It is published at the small price of 1s., and can be obtained from the Manager, 17 Craven House, Kingsway, London, W.C.

POLO ABROAD

The English officers who went out to compete in the recent International Hippic Sports at Buenos Ayres played a polo match against a team of Argentine officers at the Buenos Ayres Hurlingham Club, winning a good game by 4 goals to one. Teams, English officers :—Mr. G. F. H. Brooke (16th Lancers), Major the Hon. J. G. Beresford (7th Hussars), Captain E. H. Bayford (18th Hussars), and Colonel A. J. Godley, General Staff (back).

Argentine officers :—Lieut. A. de O. Cezar, Lieut. Casares, Lieut. Quiroga, and Colonel J. de O. Cezar (back). The game was umpired by Mr. H. Schwind.

The Rand Polo Club Tournament for the Rhodes Cup competition was marred by the withdrawal of two teams of the 3rd Hussars owing to the lamentable death of Mr. H. Leney.

The final resulted in a good game between the 4th Hussars and 9th Lancers, the former winning by 3 goals to 2. The High Commissioner, Lord Selborne, presented the Cup to the winners. The same Regiment also won the Potchefstroom Tournament for the second year in succession. In the final they beat the 9th Lancers by 5 to 2.

Nine teams entered for the Meerut Tournament. In the final the 17th Lancers' A team defeated the King's Dragoon Guards by 3 to 2.

The Hyderabad Tournament was a victory for the famous Golcondas, who easily defeated the 29th Lancers in the final.

The Royal Dragoons' Tournament was played at Lucknow, the Viceroy being present. It was a great success, the last match resulting in a close game between the 17th Lancers and Royal Dragoons. The former won, and Mrs. De Lisle, whose husband was playing for the Royals, graciously presented the Cup.

The Cawnpore Tournament rested between the 9th Hodson's Horse and 1st Durham Light Infantry, the latter winning by 8 to 2.

The final of the Indian Native Army Tournament at Quetta was between the 130th Baluchis and the 1/7th Gurkhas, the former winning by 2 to 1.

For the I.P.A. Championship Tournament the Calcutta A team effected a surprise by beating the Viceroy's Staff by 8 goals to 2.

The Punjab Tournament resulted in a close struggle between the 10th Hussars and 12th Lancers, the former winning by 4 to 3, and thus carrying off the Cup for the third year in succession. Lady Dare presented the Cup to the winners.

Mr. Alderson's Tournament at Poona was a great success, twelve teams entering; the final was fought out between the 26th Cavalry and Divisional Staff, the former winning by 3 goals to love. Major-General Alderson played for the Staff team.

For the Native Infantry Tournament, decided at Peshawar, the Guides defeated the 39th Rifles in the final by 6 to 1.

Ten teams entered for the Bechtler Cup Tournament at Jhansi. The final tie was between the 6th Inniskilling Dragoons and 30th Lancers, the former winning by 3 to 2. The Inniskillings, who had only recently arrived in India, promise to uphold their fame in polo there.

The Indian Polo Association have abolished their recent form list. Major Becker, of the 7th Cavalry, has succeeded Colonel R. St. John C. Lecky as Secretary of the Association.

There were thirteen entries for the Native Cavalry Tournament played at Umballa. For the final a grand game took place between the 39th Central India Horse and the 18th Lancers; at the end of the last chukker the score was 5 goals all: extra time being played, Colonel Watson got possession of the ball, and taking it all the length of the ground, hit the winning goal for the 39th. Teams—*39th Central India Horse*: Lieut. and Adjutant J. F. Todd, Ressaidar Ibrahim Khan, Colonel W. A. Watson, C.I.E., Captain A. B. Eckford (back); *18th Lancers*: Captain and Adjutant C. H. Howell, Lieut. R. H. Marsh, Lieut. and Quarter-master A. M. Mills, Risaldar Gul Mawas Khan (back).

The final of the Mhow Tournament resulted in a capital game between the Inniskilling Dragoons A team, and 38th Central India Horse; at the end of the last period it was four all and on play being resumed Major Ansell hit the winning goal for the Dragoons.

News by cable reports that the 10th Hussars have again won the Indian Inter-Regimental Tournament, defeating the King's Dragoon Guards in the final by 8-1, and that the 12th Lancers have won the Subalterns' Tournament.

We regret to record the death from a polo accident at Pretoria of Mr. Harold Leney of the 3rd Hussars, son of the master of the Mid-Kent staghounds. He was a fine polo player and had represented his regiment for several years.

Another sad death from a polo accident at Bloemfontein is that of Captain Egerton Orne Bellairs Black-Hawkins (4th Hussars). Both officers are sadly missed.

FOOTBALL

The Army Rugby Union Football match *v.* the Stade Bordelais Université Club, took place at Bordeaux before 10,000 spectators and resulted in a victory for the Army by 9 points (a goal and dropped goal) to 6 points (2 tries). The British officers were most hospitably entertained by the French ; a reception was given at which General Touriner, commanding the Infantry Brigade, was present ; the English Captain said he rejoiced in the ties uniting the two armies which delighted to march side by side ; a gala performance at the theatre, a ball, and a dinner at the Université Club were also given in their honour.

The Sporting Club Université de France also came to Portsmouth and played our United Services, the latter winning.

The match Officers of the Royal Navy *v.* Officers of the Army took place at Queen's Club under wretched weather conditions. It was honoured by the presence throughout the game of H.R.H. the Prince of Wales. The Army officers were completely routed, the Navy proving victorious by one dropped goal and one placed goal, 9 points to nil.

Under Association rules also at Portsmouth the Navy defeated the Army by 2 to 1, but at Aldershot in a great match the Army were victorious by 3 goals to 1 goal.

CAVALRY CHALLENGE CUP

In the semi-finals the 19th Hussars and 21st Lancers defeated the 16th Lancers and Scots Greys respectively after some close games, the match with the Scots Greys having to be replayed owing to a tie. The final between the 19th Hussars and 21st Lancers took place at Fulham on April 1, and resulted in a fine match, the 19th Hussars just winning at the end by 2 goals to 1 and thus carrying off the Cup.

BOXING

The 3rd Dragoon Guards' Tournament took place at Aldershot before a crowded house. Results :—

Novices Light-weight competition : Private Goddard, 7th Hussars.

Six round contests : Seaman Macdonald, H.M.S. Attentive ; Private Boyne, Army Veterinary Corps ; and Private Corbett, 3rd Dragoon Guards.

Eight round contest : Sergeant O'Connor, 6th Dragoon Guards.

Ten round contests : Constable Glennon, Royal Irish Constabulary, and Private Warner, 3rd Dragoon Guards.

The 18th Hussars also gave an excellent Tournament at the Curragh and the 11th Hussars at Shorncliffe.

Some of the results of the All-India Tournament were :

Welter-weights, Private Kelly, 16th Battery, R.F.A.

Middles : Private Cook, 2nd Worcestershire Regiment.

Light-weights : Private Marke, 1st Middlesex Regiment.

Feather-weights : Private Payne, 13th Hussars.

Boys' Competition : Kimberley, 13th Hussars.

Messrs. Spencer and Company's Cup was won by the 13th Hussars.

HOCKEY

The Royal Navy *v.* The Army.—Played on Dulwich cricket ground, the first match under this title, was a great success and excellent play was witnessed.

It was good hockey all through, the Army proving winners by 7 goals to 2.

The first Army Hockey Tournament (Inter-regimental) secured a fine entry of 35 teams.

RACQUETS

The Military Championship this year secured eight entries. In the final the 50th Brigade R.F.A., represented by Colonel C. D. King and Captain H. H. Bond, defeated the 1st Batt. Bedfordshire Regiment, represented by Captain J. Leader and Lieut. C. H. Ker.

The Gunners then played the holders, the 1st Life Guards, represented by Lieut. Astor and Lord Somers. Some magnificent games took place, but the combination of the Gunners was better, and in the end they wrested the championship from the Life Guards.

There were twenty entrants for the Military Singles Championship. In the final round Captain A. Berger (Army Service Corps) beat Mr. J. J. Astor (1st Life Guards, holder) by three games to two (13-18, 15-9, 15-9, 8-15, 15-9).

BILLIARDS

The semi-final round of the Army and Navy Championship at Thurston's resulted in a magnificent game between First-class Steward Davis and Private Thomas, the sailor just winning and thus qualifying to play Sergeant-Major Briggs, the winner of last year. It was a fair case of the Navy battling against the Army, but Sergeant-Major Briggs again asserted his superiority and won somewhat easily.

The challenge round in the Amateur Championship was played at Bradford between Mr. H. C. Virr, the holder of the title, and Major H. L. Fleming.

The match was 2,000 up, and Major Fleming won the championship for the Army by 2,000 to 1,501.

FIGHT WITH A LION

Lieut. G. S. Anderson, 18th Hussars, has been invalided home suffering from a severe mauling by a lion which he encountered on the borders of Somaliland. Having wounded the lion, it charged and leapt on him as he fired into it a second time. A desperate fight ensued, the officer continuing to club the beast with his rifle until his native servant, coming to his rescue, drove off the lion, which died near the scene of the encounter.

PROBLEM No. VIII

A DETACHED squadron, operating in a thinly populated civilised enemy's country is halted for the night at a farm 7 miles south of the ford at X on April 4.

The only enemy in the vicinity are one or two small patrols who were reported on April 4 to be 15 miles to the North-East.

The squadron commander wishes to establish heliographic communication with the main body as early as possible the next morning (April 5).

On consulting his map he decides that the likeliest point from which to gain communication is the hill near X, which is visible from his present position.

The country between his position and X is open, and the road there appears good and well defined.

He sends for Sergeant A, at 7 P.M., and explains his wishes, and instructs him to take half a troop (12 men) and two signallers and to reach the hill by sunrise (5.30 A.M.) and try to obtain communication.

PROBLEM A

What preparations should Sergeant A make?

What time should he start?

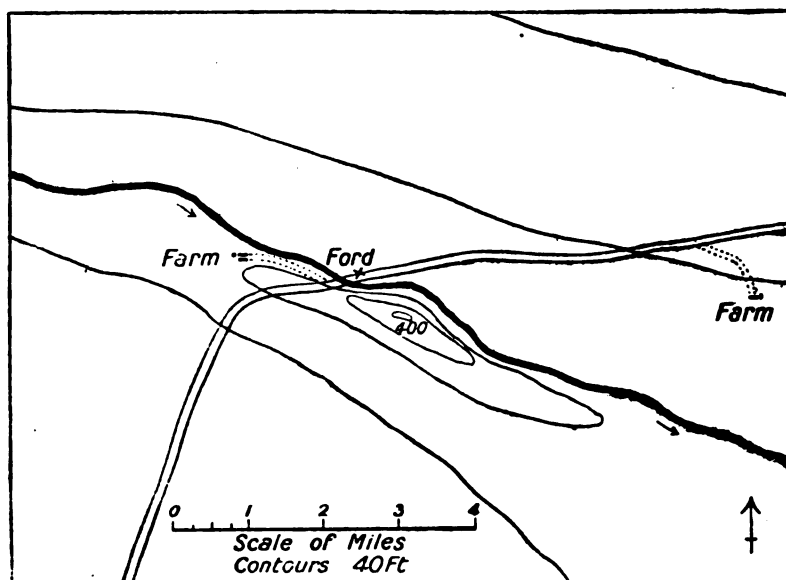
On arrival at X at 5.15 A.M., on April 5, he finds that the map is wrong and that the hill is on the further side of the river, and that the river is in flood and impassable for horses.

The river is forty feet wide, with banks eight feet high sloping down to the river.

Neither of the signallers can swim!

PROBLEM B

What should he do?



SECTION OF MAP IN POSSESSION OF SERGEANT A.

Problem No. VIII.

Open to N.C. Officers of the Mounted Branches of the Regular and Territorial Forces at home and abroad.

All Solutions (which should be as short as possible) must be attached to this page with name, rank and address of sender, must be countersigned by a Field Officer or Squadron Leader, and must reach

THE EDITOR,

'Cavalry Journal,'

Royal United Service Institution,

Whitehall,

London, S.W.,

not later than September 15, 1909.

A Prize of a Pair of Field Glasses and Case will be given to the N.C.O. whose solutions are considered the best.

The Editor's decision will be final.

From

Name

Rank *Regiment*

Address

Countersigned by

A 10x10 grid of dots forming the numbers 1 through 0 in a digital font. The numbers are arranged in two columns: 1-5 on the left and 6-0 on the right.



**GENERAL THE EARL OF PEMBROKE AND MONTGOMERY.
1734-1794.**

THE CAVALRY JOURNAL

JULY 1909

GENERAL THE EARL OF PEMBROKE AND MONTGOMERY

THE portrait on the opposite page, which is reproduced from a very handsome mezzotint engraving, given by the late Major F. L. Dashwood, of the 16th Lancers, to the Royal United Service Institution in 1892, was the work of Sir Joshua Reynolds, and represents a very distinguished officer.

Henry Herbert, 10th Earl of Pembroke, was born on July 8, 1784, and at the age of 18 he was appointed Cornet in the 1st or King's Regiment of Dragoon Guards. After serving in this Regiment for some time, he transferred to the 1st Foot Guards, and finally was appointed second-in-command of the 15th Light Dragoons, under Colonel Elliott, afterwards Lord Heathfield.

Lord Pembroke was only 26 years of age when he was promoted to Major-General in 1761, and he was 48 before he was made a full General. He died at Salisbury in 1794, holding the post of Governor of Portsmouth.

Two very valuable works fell from Lord Pembroke's pen: (1) 'Military Equitation, or a Method of Breaking Horses and Teaching Soldiers to ride, designed for the use of the Army'; (2) 'Instruction for the Education of Cavalry.' The former of these two works is the better known: it is dated February 15,

1761, and is divided into nine chapters, each one dealing with a special subject ; the concluding chapter contains remarks and hints on shoeing, feeding, management of horses, &c.

Lord Pembroke had a riding school attached to Pembroke House, Whitehall. Many persons of note were at different times at this school. Ecuyer Sigr. D. Angelo, who afterwards had a riding school of his own in Soho, was employed there, and from the Soho School many riding masters were furnished to the Cavalry Regiments. Charles A. Quist was also attached to Lord Pembroke's School ; he was appointed to the Artillery at Woolwich as Captain Commissary in September 1801. A general order was published in December 1802 which led to the formation of the Royal Artillery Riding Establishment in January 1803. The order was worded as follows : ' Captain Quist is appointed riding master to the Horse Establishment of the Ordnance, and will enter upon this appointment on January 1, 1803. Captain Quist will have the superintendence and charge of the riding house and everything belonging to it.' A copy of the ' Horse Drill,' written by Captain Quist for use at the riding establishment is in the library of the Royal Artillery Institution.

Sergeant-Major Philip Astley, 15th Light Dragoons, was for a time at Lord Pembroke's riding school. He was afterwards the owner of Astley's Circus, near Westminster Bridge, and of one in Paris. He wrote a book in 1775 entitled ' The Modern Riding Master,' and another in 1800 called ' System of Equestrian Education,' &c. Some of the above information has been acquired from an inscription on the back of the engraving at the Royal United Service Institution, which concludes : ' Lord Pembroke's work may be considered as the first book on Military Equitation in the English Service ; it was approved by the Adjutant-General October 1, 1795.'

There are four editions, the first dated 1761 ; the third (improved) edition, 1779, was translated into French in 1784, and into Italian in 1788.

B. E. SARGEAUNT.

***THE FORCING OF THE PASS OF SAMOSIERRA
BY THE POLISH CAVALRY OF THE GUARD,
NOVEMBER 30, 1808.***

*Abridged from the ‘Kavalleristische Monatshefte’ by COLONEL
H. C. WYLLY, C.B.*

LATE in the autumn of the year 1808 a French army of more than 200,000 men, under the personal leadership of Napoleon, had invaded Spain. A portion of this force, commanded by Marshals Lannes and Moncey, had moved down the Ebro towards Saragossa, while another detachment under Soult, was operating to the west in the Asturias and in the north of Leon. Each of these flanking portions of the main French army of invasion was opposed to considerable Spanish forces, while in the centre, near Madrid, an Anglo-Spanish army was being collected, which, in conjunction with Moore's corps at Salamanca (seven or eight marches west of the line Burgos-Samosierra-Madrid), was to cover the capital, against which the Emperor was advancing with the 1st Corps, under Marshal Victor, the Guard, the Cavalry divisions of Latour-Maubourg and Houssaye, and Lasalle's Cavalry Brigade—in all between 36,000 and 40,000 men.

Napoleon was not to be drawn aside from his direct advance on Madrid by Moore's threatening position on his flank, for he felt assured that the fall of the capital would put an end to further opposition on the part of the Spaniards. The movements of Moore, who had called up Hope's division from the neighbourhood of Madrid, were watched by two weak Cavalry divisions under Milhaud and Franceschi, though later Lefèbvre's corps, summoned from the direction of Valladolid, acted in

a measure as a right flank guard to the march of Napoleon ; and on November 29 the Emperor arrived at a small town called Boceguillas, at the extreme northern entrance to the pass of Samosierra, through or over which led the main road to the capital. The pass was found to be held by a division of Spanish troops under Don José San Juan, consisting of eighteen battalions of Infantry—of which only seven were regular troops, the remainder being Militia—and numbering 9,000 men, with 150 Cavalry and sixteen guns.

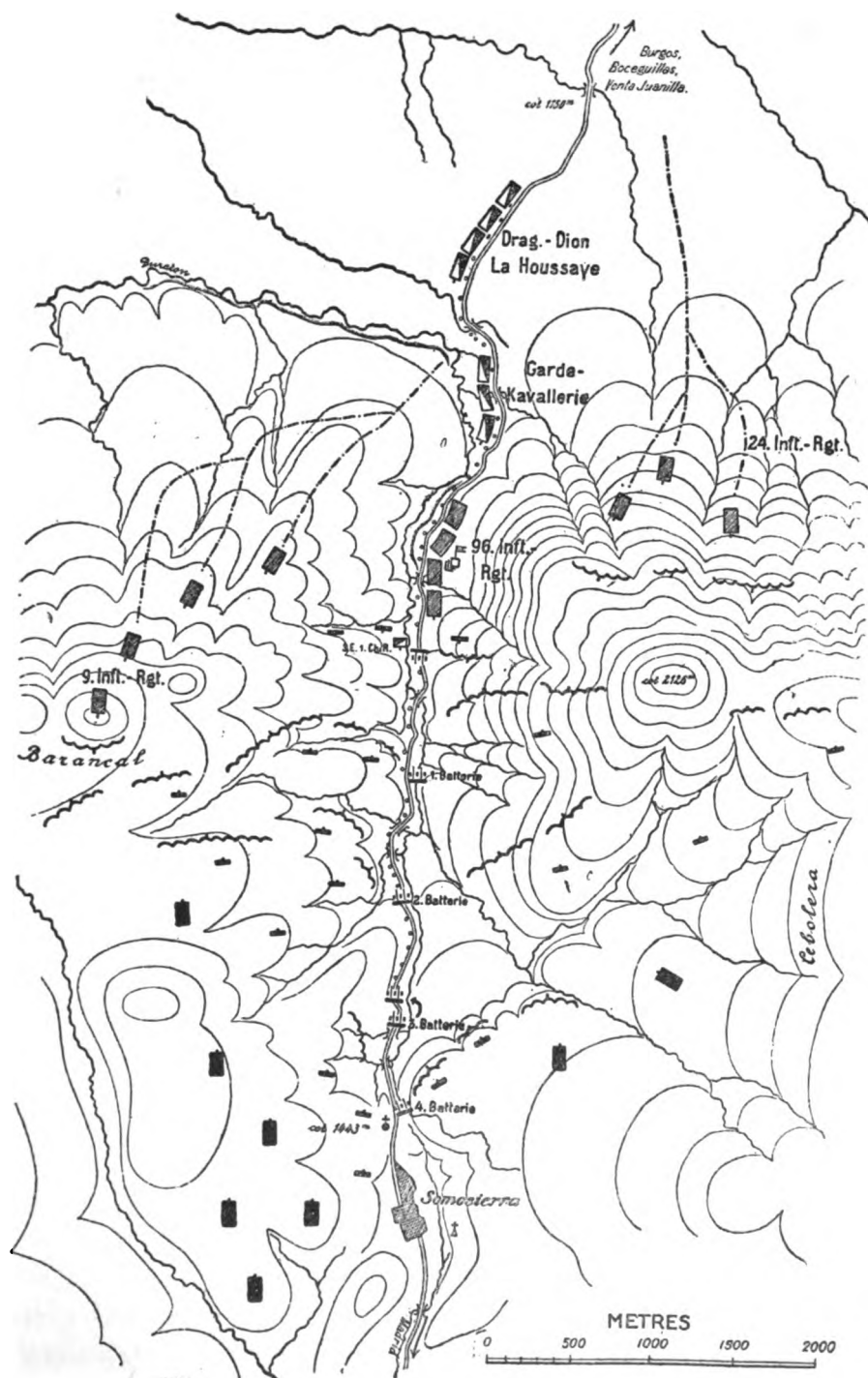
The Cavalry Brigade under Lasalle had reached the entrance to the defile on November 23, and had learnt that the pass was defended by four batteries, erected on the road itself and containing three of them four guns and one three ; one gun was found lying dismounted at the northern entrance to the pass where on the following day the French guns came into action.

With the Emperor had come up Ruffin's division of about 6,000 men and Villate's division of Victor's corps of much the same strength, together with nearly the whole of the Cavalry under Maubourg, Houssaye, and Lasalle, amounting to some 10,000 horsemen. Napoleon gave orders that Marshal Victor should force the pass at 10 A.M. next day, the 30th, with his two Infantry divisions and twelve guns of the Artillery of the Guard,* supported by the Cavalry of the Guard and Houssaye's Dragoons. At the same time Marshal Bessières was directed to assist the attack on the positions in the pass of Samosierra by the previous capture of the village of Sepulveda—which lay rather more than twelve miles to the west of Boceguillas, and which was held by between 4,000 and 6,000 men—with the division under Lapisse, supported by the bulk of the Cavalry.

In the orders to Marshal Victor it is stated that 'if the attack (on Sepulveda) is begun at seven o'clock the affair will be over by nine, and you should then be ready to attack and seize the pass of Samosierra.' As a matter of fact, however, the garrison of Sepulveda did not await Bessières' attack, but evacuated the

* The divisional Artillery of neither division had yet come up.

FORCING THE PASS OF SAMOSIERRA 275



village at 9 P.M. on the 29th, and of this Marshal Victor was informed at 3 A.M. on the 30th.

The task set to the troops under Marshal Victor seemed by no means an easy one. For more than three miles the main road from Burgos to Madrid winds through a defile until it crosses, at a height of some 4,700 feet, the summit of the pass. Nowhere was the road especially steep, for the total rise from the mouth to the crown of the pass was rather under 1,000 feet. On either side of the road rose steep slopes covered with rocks and boulders, impassable alike to mounted men or guns, while the road was so tortuous that it was impossible to command it by the fire of guns throughout its length. The Spaniards had done what they could for the defence of the road. About a mile and a quarter below the summit of the pass, and right across the road, they had placed a battery of four guns, which thence commanded the road up to their extreme effective range. On the saddle itself was a similar battery in an emplacement some forty-five yards in length, and between these two batteries were two others mounting respectively three and four guns. By this means the road, throughout a length of considerably more than 3,000 yards, could be continually swept by Artillery fire. It being impossible to move Artillery parallel to the road, and there being nowhere room on the lower portion of the pass for more than two guns to be brought at the same time into action, the Spaniards had every reason to hope that they could overpower any Artillery which might be brought against them. The hills about Barancal and Cebolera were occupied by sharpshooters, with the regular battalions in support. The bulk of the rest of the Spanish Infantry—for the most part Militia—was drawn up to the west of the road about the village of Samosierra.

This was the situation when towards nine o'clock on the morning of November 30 the action was commenced by Ruffin's division. Thick fog lay over hill and valley and made progress slow on either side of the road. Marshal Victor had given orders that the four battalions of the 9th Light Infantry should

climb the heights towards Barancal, the three battalions of the 24th of the Line those about Cebolera, while the 96th was to advance up the road, supported by a horse battery of the Guard. In spite of the fact that the 96th had been at the tail of the column, and that the 24th had early moved off to climb the heights, the 96th on the main road soon got ahead of the two regiments on either flank. Their movements hidden by the heavy fog, the advance of the 96th came somewhat unexpectedly upon the enemy, and was at once received with a heavy fire from the nearest battery and from the Infantry holding the high ground on the flanks. The French Infantry on the right and left were not yet in action, and the 96th, sending forward the light companies in skirmishing order, replied to the enemy's fire, and began slowly to gain ground, while Marshal Victor moved the battery forward in support. Only two of its guns, however, were able to come together in action, and these could not overpower the Artillery of the defence, so that it appeared that the action must at least be a long-protracted one. The fog began to lift, the sun shone out, and still the fight was confined to the centre, while the regiments on the flanks struggled forward.

At this moment the Emperor appeared upon the scene. He had left Boceguillas early, accompanied by the Cavalry of his Guard, and had breakfasted in a deserted house at the mouth of the pass, quietly waiting to hear the result of the orders which had been given to Marshal Victor.

By degrees, however, as the firing in front grew heavier and no news came of any progress being made, the Emperor became impatient, and, mounting his horse, rode forward accompanied by the 3rd Squadron of the Polish Light Cavalry of the Guard and by two troops of the Chasseurs à Cheval of the Guard. The remainder of the Cavalry of the Guard—the Polish Light Cavalry in front—followed by the four regiments of Dragoons under Houssaye, had closed up at the entrance of the pass.

Napoleon rode up to the position where the two French guns were in action, and, unmindful of the Spanish bullets whistling

about him, he scanned the enemy's position through his glass. Two French gunners were frightfully mutilated before his eyes, but he gazed on unperturbed, and calling before him a deserter, a *ci-devant* soldier of France, he closely catechised him as to the dispositions of the enemy. The Emperor remained here long enough to take in the situation—to recognise the enclosed nature of the defile in front, the position of the nearest Spanish battery, and the Spanish Infantry on the flanks. It is therefore impossible to conceive that the orders which followed were given under an impulse of mere impatience or through ignorance of the situation. But it was with the object of using what seemed at the moment to the great master of the art of war the best instrument for clearing up that situation that Napoleon gave orders to the commander of the advanced Cavalry to direct the squadron of Polish Light Cavalry forming his personal escort to attack the batteries in their front. General Montbrun turned his horse round and, accompanied by Colonel Piré, Berthier's staff officer, rode up to the squadron to give them the order ; but as he came with the leading files of the squadron to the part of the road then swept by the fire of the Spanish guns, the idea of a Cavalry attack seemed to Montbrun both a terrible and a hopeless one. He then drew back the head of the squadron under cover, and sent Piré to tell the Emperor that under the circumstances the attack was 'impossible.' Napoleon flared up in wrath at the message. He knew not, he stormed out, the word 'impossible,' and calling up Count Ségur, who stood by, the Emperor repeated the order, which was conveyed by Ségur to Lieut.-Colonel Koziatulsky, the squadron commander. Ségur could not bring himself to order these men to ride, unattended, to what seemed their death, and as the squadron, cheering wildly, swept past the Emperor in column of sections up the pass, Count Ségur joined in the charge.*

* The strength of the squadron was nominally 170, but not more than 140-150 men rode in the charge. At this date a French squadron was divided into two troops.

As the horsemen came into view upon the road the Spanish gunners ceased firing at the opposing Artillery, and concentrated their fire upon the Cavalry, while from the high ground on either side the Spanish Infantry tore their ranks with musketry. The horse of the squadron commander—whose head-dress and jacket were pierced by the bullets—fell dead, pinning his rider beneath him; Count Ségur, severely wounded in three places, fell to the ground; the leader of the first troop, Lieut. Rudowsky, was killed, and behind him men and horses fell so fast as to form a barrier upon the road, which for a moment checked those in rear. But Captain Dziewanowsky, commanding one of the two troops, brought the squadron on with a rush, shouting '*En avant! Vive l'Empereur!*' The first battery was carried, and the wild race swept on; all formation was lost, and men and officers galloped forward and were soon raging among the guns of the second battery. The Spaniards had by no means lost their heads under the desperate onslaught, and many a brave horseman was brought to the ground under the heavy Artillery and Infantry fire. One subaltern fell between the first and second batteries, another between the second and third, and in front of the third line of guns Captain Dziewanowsky's right knee was shattered by the full charge of a field gun at point-blank range. The commander of the other troop, Krasinsky, calling on the few survivors about him, continued the charge, until, just as the summit of the pass was reached, he too fell wounded from his horse. At the fourth and last battery the Spanish gunners still stood firm, and from all sides a heavy but ill-directed fire was being poured into the handful of horsemen. Only one officer still kept his saddle, a subaltern named Niegolowsky, who had just rejoined his squadron from patrol when the charge commenced. 'Where are our people?' inquired he, turning to a sergeant who rode beside him. 'Dead!' was the reply. Galloping on, the fourth battery was ridden through, the gunners sabred; and the Poles turned on the Spanish Infantry. By this time the sergeant was down, and Niegolowsky's charger being

shot under him, he fell to the ground, and was at once surrounded by Spanish infantrymen from whom, while lying helpless under his horse, he received nine bayonet wounds, a blow from a rifle-butt on his head, while his face was grazed by two bullets.

No. 1 Squadron of the Polish Light Cavalry following close upon the heels of No. 3 found the pass evacuated by the Spaniards, and the commander, hurriedly rallying the men of the two squadrons, took up the pursuit in the direction of Buitrago, and the remaining two squadrons of the regiment and the Chasseurs à Cheval following fast no fewer than 3,000 prisoners and 4 colours were captured.

Thus what General Montbrun had held to be 'impossible'—what probably every man present, except Napoleon, had looked upon as a hopeless sacrifice—was successfully accomplished, at a heavy loss to the squadron it is true, but one which probably was as nothing to that which the forcing of the position by ordinary methods would have entailed. The moral effect of the charge made the work of the flanking Infantry comparatively easy; the Spaniards offered them everywhere but a feeble resistance, and the total loss of the French Infantry was only five officers and something like a hundred men. Napoleon pushed on, stopping in the pass to speak to the wounded and dismounted Poles, and to promise Niegolowsky the Cross of the Legion of Honour, and three days later he was in Madrid.

The casualties in the squadron were as follows: of the seven officers present only one, the squadron commander Koziatulsky, was unhit, but he was badly contused by the fall with his horse; three subalterns were killed, one captain died eighteen days later of his wounds; one captain and one subaltern were wounded—the latter, Niegolowsky, very severely. (This officer recovered and continued to serve until 1815, when he entered the Polish service, and finally died in Paris in the 'fifties.) Of the men of the squadron, 14 were killed, 43 wounded, and 24 received contusions, or a total of 81 casualties out of about 140 who took part in the charge; 35 horses were also killed. So that this squadron, which accomplished so magnificent a feat of arms, lost

roughly 87 out of a total of rather under 150 of all ranks, while it captured 15 guns, 1 colour, and 200 prisoners.

Well might the Emperor say, when he inspected the regiment on the following day, that 'they were the bravest of all Cavalry, that they were worthy thenceforth to be numbered among the Old Guard.'

The following notes concerning the history of this regiment may be of interest :—

It was raised in the Duchy of Warsaw by an Imperial Order dated April 6, 1807, in consequence of a wish of the Emperor to avail himself of the services of a race of horsemen whose value he had learnt, and also from a sense of the political importance of attaching young members of the Polish nobility to his person. There were then already in existence three Cavalry regiments of the Guard—the Grenadiers à Cheval, the Chasseurs à Cheval, and a regiment of Dragoons—and the newly raised regiment of Polish Light Cavalry was admitted with the others to the Young Guard, with an establishment of four squadrons, each of two troops of 120 men, or a total regimental establishment of all ranks of 988. The men were armed with a curved sabre and a carbine (musqueton) with a short bayonet, and even the officers carried the musqueton, but without bayonet.

Part of the regiment was engaged at Friedland and at the siege of Dantzic, and a detachment accompanied King Joseph to Madrid in 1808, the remainder arriving in Spain later. After Samosierra the 1st, 2nd, and 3rd squadrons—that is, those which had been actually present on the day—were admitted to the Old Guard. In 1809 the regiment was ordered from Spain to the theatre of war in Germany; two strong squadrons were present at Aspern, and the whole of the regiment, less a small detachment which had remained behind in Spain, was engaged at Wagram. At this last battle the corps was so strong that it was employed as two regiments—each troop as a squadron and four troops as a complete regiment. At Wagram it covered itself anew with glory, but suffered so severely from the lances of the Austrian Uhlans that after the battle the men were permitted

to arm themselves with the lances of the enemy. The Emperor would appear at that time to have had some doubt as to the superiority of the lance over the sabre as the Cavalry weapon, but when at Schönbrunn Colonel Krasinsky, then in command, arranged some mounted combats between individual men of his corps armed with the lance and French Cuirassiers armed with the sword, and convinced Napoleon of the superiority of the 'Queen of Weapons,' the Polish Cavalry were allowed to retain their lances, and were thenceforth called *Chevaux-legers-Lanciers*.

(Napoleon would appear to have been thoroughly convinced of the advantages of the lance, for in 1810 he turned the Dutch Hussars of the Guard into Lancers, and in the year following out of six regiments of Dragoons, one of Chasseurs à Cheval, and two newly raised regiments, he formed nine regiments of Lancers.)

Prior to the outbreak of the war with Russia, 400 men of the Polish Lancers of the Guard took part in the operations in Spain. In March 1812 a fifth squadron was raised, the strength of each being now 250 men. The regiment proceeded to Russia with the Grand Army and performed excellent service, especially on October 25, when 550 Polish Lancers overthrew 2,000 Cossacks in the charge, while a squadron under Koziatulsky, a survivor of Samosierra, when escort with the Imperial Headquarters, saved it from a serious attack by Cossacks and Russian riflemen. In the campaign of 1813 the Polish Lancers fought at Dresden and Leipzig, and in the year following at Arcis-sur-Aube, Montmirail, Champaubert, and Château-Thierry; while a squadron of ninety-three of all ranks, which accompanied the fallen Emperor to Elba, returned with him to France and formed the nucleus of a new regiment of Lancers of the Guard, which at Waterloo fell upon the Union Brigade when their ardour in the charge had carried them too far.

With the final banishment of the Emperor to St. Helena, and the setting of the Napoleonic star, all that were left of the Polish Lancers of the Guard returned home and entered at Warsaw the Polish Guard of the Russian Czar.



A POLISH LANCER AND A CHASSEUR À CHEVAL
OF THE IMPERIAL GUARD.
1811.



**CAPE MOUNTED RIFLEMAN
IN MARCHING ORDER.**

The horse is an Argentine, which breed is now replaced by Cape horses.

THE CAPE MOUNTED RIFLEMEN

By THE COMMANDANT

IN 1855 the Frontier Armed and Mounted Police was formed at Grahamstown, Cape Colony, by Commandant Walter Currie, who had rendered distinguished service in the native wars of 1846, 1850-51, and 52. The establishment of the corps on its formation was, approximately, seventeen officers and 500 non-commissioned officers and men. The uniform was a tan-coloured moleskin with a leather helmet. The men were armed with double-barrelled guns, one barrel rifled, the other smooth bore ; they also carried revolvers and bowie knives.

From 1855 to 1877 the corps rendered excellent service in numerous punitive expeditions against natives.

In 1877 the Galeka-Gaika War broke out, and the Frontier Armed and Mounted Police took a prominent part in most of the engagements of that campaign.

In 1878 the Government decided to re-organise the Frontier Armed and Mounted Police as a regular regiment of Mounted Riflemen, which would be recognised as the Permanent Military Force of the Cape Colony, and an Act of Parliament giving effect to this decision was passed.

On the formation of the Cape Mounted Riflemen, Inspectors of the Frontier Armed and Mounted Police became Captains, and the Sub-Inspectors became Lieutenants.

Colonel Bayly, late 9th Regiment, was appointed to the command in January 1879.

On November 20 of the same year Moirosi's Mountain, three attempts to capture which by mixed Forces had failed,

was taken by escalade by the Cape Mounted Riflemen under Colonel Bayly.

In January 1880 the second (left) wing of the Cape Mounted Riflemen was formed, Lieut.-Colonel Carrington, C.M.G., 24th Regiment, being appointed to the command.

The Regiment rendered admirable service during the Basuto War of 1880, when it formed a portion of the Force commanded by Brigadier-General C. M. Clarke, Commandant General, Cape Colonial Forces (now General Sir Charles Mansfield Clarke, K.C.B.), the right wing, under Lieut.-Colonel Bayly, operating near Maseru, and the left, under Lieut.-Colonel Carrington, in the vicinity of Mafetang.

In 1884 the two wings were amalgamated, Lieut.-Colonel Bayly assuming command of the Regiment, Lieut.-Colonel Carrington returning to service with the Imperial Army.

In January 1892 Major J. M. Grant, late 85th Light Infantry, was appointed to the command.

During 1893 a detachment of the Regiment was attached to the Matabeleland Field Force.

On January 1, 1896, Lieut.-Colonel J. M. Grant retired, and Major E. A. Dalgety was appointed to the command.

In 1897 one squadron and a section of the Artillery Troop formed a portion of the Langeberg Field Force, which was commanded by Lieut.-Colonel E. A. Dalgety, Cape Mounted Riflemen.

The Regiment served throughout the South African War (1899–1902), and was specially distinguished by its gallant conduct during the siege of Wepener, where it held the most exposed position for 17 days. During the latter stages of the war a wing of the Regiment, under its present commanding officer, Colonel Lukin, together with the 9th Lancers and Yorkshire Hussars, formed the renowned ‘Scobell’s Column.’

In 1902 Colonel Dalgety retired, being replaced in the command by Colonel H. T. Lukin.

In 1906, at the request of the Natal military authorities,

the Regiment furnished 1 officer, 24 gunners, and 13 native drivers, with 6 Maxim guns, mules, and pack equipment, and 1 officer and 30 signallers, for service with the Natal Field Force during the native rebellion. Their services were most favourably reported upon by Colonel Sir Duncan Mackenzie, K.C.M.G., C.B., commanding Natal Field Force.

In 1907 a troop was attached to the squadron of Cape Mounted Police, commanded by Major F. A. H. Elliott, D.S.O., Cape Mounted Police, which was successful in killing the rebel chief Marengo and capturing his followers after a long and trying chase through the Kalahari Desert.

The following are the casualties which the Regiment has sustained on active service prior to and during the South African War:—

Prior to South African War.—Killed, 5 officers, 4 N.C.O.'s, 25 privates; wounded, 6 officers, 15 N.C.O.'s, 28 privates; died of disease, 1 officer, 4 N.C.O.'s, 60 privates.

South African War, 1899–1902.—Killed, 1 officer, 8 N.C.O.'s, 23 privates; died of wounds and disease, 3 officers, 5 N.C.O.'s, 21 privates; wounded, 9 officers, 39 N.C.O.'s, 90 privates.

Five V.C.'s and numerous other decorations have been awarded to members of the Regiment for distinguished service in the field.

Prior to the South African Campaign the strength of the corps was 40 officers, 864 other ranks European, and 50 native troopers; it has now been reduced to 31 officers and 550 other ranks European, 55 native troopers, and 20 native drivers (Artillery).

These are organised in 5 squadrons and a battery of Artillery (numbering 60 Europeans and 20 native drivers). The squadrons vary in strength according to the local requirements of the district in which they are stationed, and their principal duties in peace are those of policing the native territories.

The regiment is mounted at Government expense; the dearth of colonial horses caused by the enormous demand for

them during the South African War necessitated the Regiment being mounted on imported (principally South American) horses for several years after the declaration of peace in 1902, but these are being gradually replaced by colonial horses, which are in every way suitable for the work they are called upon to perform, averaging 14·2 to 15 hands, strongly built, and purchased at four to eight years old.

The saddlery is the universal pattern, similar to that used in the Cavalry.

Conditions of service are most liberal: enrolment in the first instance is for a period of five years, with re-enrolment for periods of three years.

Riflemen, except under special circumstances, are discharged time expired on completion of eleven years' service.

Horses, saddlery, horse rations, arms, and accoutrements (including cloaks and belts, blankets, &c.) are provided by Government.

The first issue of uniform is free, after which an allowance to cover upkeep is paid quarterly in arrear.

The rates of pay are as follows:

Riflemen on enlistment . . . 5*s.* per diem.

On completion of one year's service Good-conduct Pay may be drawn at the rate of 6*d.* per diem., with an additional 6*d.* after two years' service.

On re-enrolment after five years' service 1*s.* per diem. is the rate of Good-conduct Pay, with a further 6*d.* per diem. after eight years' service.

Corporals	8 <i>s.</i> per diem.
Sergeants	9 <i>s.</i> per diem.
Squadron Sergeants-Major . . .	10 <i>s.</i> per diem.
Regimental Quartermaster Sergeant	} 11 <i>s.</i> per diem.
Orderly Room Sergeant	
Paymaster Sergeant	

Bandmaster (Warrant Officer)	10s. per diem.
Regimental Sergeant-Major (Warrant Officer)	12s. per diem.

NOTE.—The above rates of pay cover all expenses for messing.

Extra Duty Pay, at the rate of 6*d.* per diem for each language, is granted to members of the Regiment, conversant with 'Dutch' and 'Kaffir,' on passing the necessary qualifying examination.

More than 83 per cent. of the N.C.O.'s and men draw pay for one or both of the above languages.

Allowances at rates varying from 6*d.* to 2*s.* 6*d.* per diem, are granted to a limited number of bandsmen, clerks, farriers, gunners, instructors, range takers, signallers, and shoeing smiths.

Recruits are drawn chiefly from a good class of colonial youths, but there are in the ranks a considerable number of old public-school boys who have failed for the Army or some other profession, and whose desire for an open-air life has induced them to emigrate to South Africa.

During his recruit's course a rifleman, in addition to the ordinary mounted and foot drills and musketry, which includes revolver practice, receives instruction in the following subjects :

Making a fire trench.	The duties of rural police.
Knotting and lashing.	Horsemastership.
Outpost duties.	

The course extends over a period of from four to eight months, according to the knowledge and capabilities of the recruit on joining.

Every effort is made to ensure the future Mounted Rifleman becoming a bold and skilful rider across country, and an adept at moving from one position to another by the shortest route and without being observed.

Special attention is paid to teaching him to mount and dismount with celerity, and with this object he is instructed in vaulting on and off a horse whilst in movement.

The horses are taught to lead well and to be quick and active, but no attempt is made to train them in other respects on the lines adopted in the Cavalry, as it is fully realised that accuracy in dressing, intervals, distance, and pace are not essential, as they are in that arm.

The Musketry courses for both recruits and trained men are identical with those in vogue in Regular Regiments of the Imperial Army. The regimental figure of merit for 1908 was 217.

When brought into Squadron Headquarters for the Annual Course of Musketry, non-commissioned officers and riflemen are put through a course of field training which includes instruction in the following :—

Entrenchments.
Outpost Duties.
Reconnaissance.

Horsemastership.
Revolver Practice.

The armament has undergone various changes :

In January 1880 the Regiment was armed with the Cavalry M.H. carbine, prior to which the Snider pattern of the same arm was in use, and swords were issued about the same time.

These weapons were carried in the same manner as in Cavalry Regiments similarly armed. In 1899 swords were discarded and the M.H. carbine was replaced by the Lee-Enfield rifle carried in a bucket similar to that used by the Mounted Infantry. To the muzzle of the rifle is attached an arm sling through which the rifleman's arm is passed when on the line of march.

The Patterson Equipment has been in use by one squadron for some time past, and it has been decided to adopt it for the whole regiment when funds permit.

The Artillery Troop is armed with six 15 pounder B.L. guns drawn by mules: the drivers are natives who drive postillion, while the gunners are Europeans mounted and trained as Horse Artillerymen. The Troop has also four 2·5 inch R.M.L. guns with Mountain equipment, a knowledge of which together with that of the Maxim machine gun (pack equipment) is imparted to

all ranks of the Artillery branch. The draft mules are also trained to carry packs.

An establishment of 30 non-commissioned officers and riflemen receive extra pay for proficiency in signalling, the test being identical with that enforced in the Regular Regiments of the Imperial Army.

Riflemen before being appointed Lance-Corporals are required to undergo a course of instruction, with a view to their passing an examination as to their fitness to instruct men of their squadrons in drill, rifle exercises, and musketry. They are also required to have an elementary knowledge of the following subjects, viz.—police duties, horsemastership, reconnaissance, outposts, field entrenchments, and semaphore signalling.

All commissions are from the ranks, subject to competitive examination.

Candidates are selected by the Commanding Officer from names submitted by Squadron Commanders.

The following are the subjects of examination :—

1. The command of a squadron in the field, either detached as a unit or as a portion of a regiment.
2. Musketry.
3. Tactics—to include the following: Outpost and reconnoitring duties, advance and rearguards, patrols, and the attack and defence of positions particularly in regard to native warfare.
4. Field sketching and reconnaissance.
5. Elementary field engineering.
6. Interior economy and administration of a squadron, including the system of pay.
7. Stable management, including elementary veterinary knowledge.
8. The Rules and Regulations of the Cape Mounted Riflemen.
9. The Colonial Forces Act and Military Law.
10. Criminal procedure in relation to police duties and the various statutes bearing on police work.
11. A fair colloquial knowledge of Dutch and Kaffir.

CANADA AS A COUNTRY FOR BREEDING REMOUNTS

By Lieut-Col. V. A. S. WILLIAMS, A.D.C., R.C.D.,
Inspector of Cavalry

THE Canadian National Bureau of Breeding was organised in the spring of 1908, being incorporated under Dominion of Canada Charter in the autumn of the same year with offices in Montreal.

The object of the society is the improvement of the breed of horses in Canada, by placing thoroughbred stallions of class and pedigree within easy reach of farmers with good cold-blooded mares; from the very first its operations have been attended with unqualified success, and it has been the means of revealing a state of affairs which few thought existed in Canada, viz.—that the country from coast to coast has been hungering for the thoroughbred, and that Canadian farmers have been only waiting for a chance to improve the breed of their horses.

The Canadian Bureau is not a commercial concern: it holds the view that the reason farmers have not benefited by the use of thoroughbred blood is because such blood has not been easily available, the fees for thoroughbred stallions being very high and the initial cost of purchasing such horses being beyond the reach of the average farmer; and it is therefore undertaking to secure the stallions and to deliver them free of all cost to responsible men, who in turn will give their neighbours the service at a nominal fee, which will go to pay for the maintenance of the stallions.

The conditions are most simple and have been approved by thousands of farmers who have written to the Bureau commending it for its liberality and fairness.

One of the strictest rules of the Bureau is that the horse shall be well cared for, and the right is reserved to take back any horse which, in the opinion of the Bureau Inspector, is not being properly treated. Successful applicants have hitherto taken the greatest care of the horses entrusted to them, and exhibit a keen delight in keeping them in the very best possible condition.

It is not only in the case of stallions that the Bureau's influence is felt, for the brood mares, too, are getting far better treatment than formerly, being looked after on the lines laid down by the Bureau.

Every man who has charge of a Bureau horse is supplied with a Service Book in which is registered the name of the owner of every mare covered, so that the Bureau can keep in touch with them, can send instructions and advice regarding the care of both mares and foals, and can further direct the War Office buyers and others to the farms where good half-bred horses can be bought. To provide such information is one of the most important features of the work, for it is now admitted on both sides of the Atlantic that the new organisation, if successful, will go far towards solving the remount problem in England by creating a type of horse suitable for the Imperial Cavalry.

All Governments acknowledge that the only way to get cavalry horses is by means of the thoroughbred cross, yet such is the state of the breeding industry in Canada, that even the mounted branches of the permanent forces in Canada and Royal North-West Mounted Police have great difficulty in getting the saddle horses necessary to keep their forces up to the standard. When it is considered that the Province of Alberta is twice the size of Great Britain and Ireland, and that the Province of Saskatchewan is larger than France and Germany, the scarcity of saddle and cavalry horses is all the more surprising ; yet the hundreds of appeals to the Canadian Bureau

from the Canadian north-west show the cause of this lamentable state of affairs to be simply that the farmers and small breeders have no thoroughbred stallions and are forced to breed to anything that is available.

Let the demand for blood stallions be supplied, and when the next national emergency comes, the millions spent for cavalry horses will remain within the Empire instead of going to enrich other nations, as was the case in the late South African war. Kipling's motto, 'Keep the money in the family,' is not a bad one to follow, especially in times of national stress.

It is understood that the Bureau will place 100 stallions before the end of 1909, and if possible put out an equal number every year for the following four years: if this plan is carried out, Canada will have the greatest breeding bureau in the world and in round figures about £1,000,000 per annum will go into the pockets of Canadian farmers.

In conclusion I must add that though the Canadian National Bureau is not controlled by or affiliated with any Jockey Club or Racing Association, it aims at being on friendly terms with all such organisations, realising as it does that the racecourse is the training ground of the thoroughbred and that racing is the supreme and only trustworthy test of the pure-blooded horse.

**SOME SUGGESTIONS REGARDING THE ENGINEERS OF THE CAVALRY DIVISION
(EXCLUDING TELEGRAPHS)**

BY AN R.E. OFFICER.

THE writer has discussed the question of the organisation of the Engineers of the Cavalry Division with several officers, including some of the Cavalry arm, and there seems to be a general idea that, although the total personnel is no whit too large, yet their organisation might be altered with advantage; and he therefore ventures to offer these suggestions in the hope that they may give rise to consideration of the subject.

Outline of proposed alterations.—The present organisation of the field troops appears to aim at making these units too self-contained in the matter of equipment, with the result that they become unwieldy owing to their large amount of transport. The writer's suggestion is therefore that the Engineers of the Cavalry Division should be organised in four field troops of about two-thirds their present strength, which should be much more mobile than the present ones, and which might with advantage be permanently allotted one to each brigade, plus another unit, which would be a divisional unit, somewhat less mobile, carrying a reserve of stores of all sorts. The functions of the field troops would be the execution of the rough and ready work which would usually be encountered when working with a Cavalry Brigade in the field, and their engineer equipment need only include entrenching, cutting, and miner's tools, raft equipment, explosives, telephone equipment, the usual water supply stores, carpenter's tools, a few smith's and bricklayer's tools, and miscellaneous articles, such as sandbags, wire, cordage, spikes, &c. The function of the divisional unit, mounted company, engineer

column, or whatever it be called, would be to supplement the field troops with men and stores when confronted with a large engineering job which they had not got either sufficient men or gear to tackle by themselves, and to replenish their stores as they became expended.

Main advantages of proposals.—The main advantages of such an organisation would appear to be:—(1) That each brigadier would have at his disposal a handy and mobile unit of Engineers ready to carry out any ordinary hasty piece of work in the field (which I venture to think he would find useful), instead of a somewhat unwieldy unit hampered with much transport as at present, which for this reason he probably would not care to push far to the front. (2) The divisional C.R.E. would always have at his disposal a body of men and stores ready to throw into any desired locality whenever any work requiring them was encountered. These occasions would probably be of frequent occurrence, and in such cases it would be perfectly feasible to push up the divisional unit, or part of it, to the front to undertake it. This unit being almost entirely carried in wagons would not be delayed in their work by riding horses to look after, though some would certainly have to be mounted on horses to enable them to carry out special work. (3) If used in this way, the divisional unit would be invaluable in carrying out such work as the restoration of communication across a wide river before the arrival of the main army ; or, if unable to complete it, at any rate in pushing it on pending the arrival of the Engineers of the leading division. By this means much delay would be saved to the advance of the main army with very little interference to the Engineer service of the Cavalry Division ; and, on the arrival of the other Engineer units of the army, the Cavalry Divisional unit would again push forward to regain touch with its divisional headquarters.

Details of proposals.—Table A shows the war establishment of the Engineers of the Cavalry Division (excluding the wireless telegraph company) as at present organised, and those of the proposed units. The total personnel of the latter units has

purposely been kept as nearly as possible the same as that of the existing organisation, as it is not thought that a scheme involving an increase would be likely to meet with approval.

Having looked at the subject from the point of view of war, a glance at Table B will show how it is proposed to adapt these proposals for peace.

It is essential that the field troops themselves, being very small units, should in peace be kept up to war establishment except in the matter of horses, as otherwise they would become too small to undertake any useful work; and the fact that the greater part of the personnel of the divisional unit on mobilisation would be reservists should make it perfectly feasible to keep the field troops always up to the establishment suggested, even with a considerably longer term of enlistment than the three-year term at present in force. It will be observed that the riding horses in the field troops in peace have been cut down to the absolute minimum, so as to allow of the sappers obtaining more practice at their trades than is possible at present.

Conclusion.—In conclusion, the advantages of these proposals appear to be:—(1), (2) and (3) those previously stated; (4) the sappers of the field troops who are not mounted on horses are carried on the vehicles which contain the stores they have to work with, and it is not necessary as at present to bring up a separate heavy wagon which contains no stores but only men before undertaking any work; (5) a light cable cart for laying telephone lines is now added to the equipment, supplying a want which has been frequently noticed in the present organisation of a field troop; (6) owing to the reduction of the divisional unit in peace to little more than a cadre, it should be possible to keep the personnel of the field troops up to war strength, and also to increase the term of enlistment for sappers of the field troops, a very desirable measure if the mounted sapper is to be thoroughly efficient in every branch of his work.

NOTE.—No details regarding the trades of the men, or the equipment to be carried have been gone into, as these questions are considered beyond the scope of this article.

TABLE A

	Major	Capt.	Lieute.	T.S.M.	T.Q.M.S.	Sergts.	Corpls.	2nd Corpls.	Loc. Corpls.	Sappers	Drivers	Trump.	Part. Sergt.	Sb. Sm. Corp.	Sb. Sm.	Horses	
																Riding	Draught and pack
Present organisation:																	
Each field troop .	—	1	2	1	1	2	2	8	8	34	29 ¹	1	1	—	1	41 ²	40
For 4 field troops .	—	4	8	4	4	8	8	12	12	136	116 ³	4	4	—	4	164	160
Proposed organisation:																	
Each field troop .	—	1	1	1	1	1	2	2	2	24 ⁴	16 ⁵	1	1	1	1	29	80 ⁶
For 4 field troops .	—	4	4	4	4	4	8	8	8	96	72 ⁷	4	4	4	4	116	120
Divisional unit .	1	—	2	1	1	2	2 ⁸	4 ⁸	4 ⁸	40 ⁸	36 ⁹	1	1	1	1	24	61 ¹⁰
Total for Divisional Engineers (excluding Headquarters)	1	4	6	5	5	6	10	12	12	136	108 ¹¹	5	5	5	5	140	181

¹ Plus 1 A.S.C. driver.² Includes officers' horses.³ Includes 1 spare pair, and 2 pack horses led by drivers on riding horses.⁴ Plus 3 A.S.C. drivers.⁵ Plus 4 A.S.C. drivers.⁶ Includes 1 spare pair, and 2 pack horses led by drivers on riding horses.⁷ Plus 12 A.S.C. drivers.⁸ Plus 16 A.S.C. drivers.⁹ Includes 5 spare horses.¹⁰ Only mounted on horses.¹¹ Plus 12 A.S.C. drivers.*Transport of Proposed Units*

Each field troop—2 double tool carts or engineer equipment, each carrying 4 sappers } Six horse teams as at present; total load
 1 vehicle for raft equipment, carrying 4 sappers } (including men) not to exceed 2 tons.
 1 two-wheeled cable cart fitted up for laying telephone lines, carrying 2 sappers, with a pair of horses.
 2 pack horses carrying pack saddles, but not loaded under normal conditions on the march, but ready to be loaded up at any time with what ever stores may be required.

1 G.S. wagon for supplies, baggage, ground sheets, and miscellaneous stores for the unit; and 1 water cart; 2nd line.
 Divisional unit—6 'wagons spring field troop' to carry dismounted N.C.O.'s and sappers } 1st line, four-horse teams; total load not to
 (organised in 6 G.S. wagons for engineer equipment } exceed 82 cwt.
 two sections). 8 forage carts for supplies, baggage, ground sheets, and miscellaneous stores for the unit; and 1 water cart; 2nd line.

TABLE B

	Capt.	Lieuts.	T.S.M.	T.Q.M.S.	Sergts.	Corpls.	2nd Corpls.	1st Corpls.	Rappets	Drivers	Trump.	Parr. Sergt.	Sh. Sm. Corp.	Sh. Sm.	Bldng.*	Horse Draught
Present peace organisation:																
Each field troop . . .	1	2	1	1	2	2	8	8	81	28	1	—	1	1	26	26
For 4 field troops . . .	4	8	4	4	8	8	12	12	124	92	4	—	4	4	104	104
Proposed peace organisation:																
Each field troop . . .	1	1	1	1	1	2	2	2	24	18	1	1	1	—	18	24
For 4 field troops . . .	4	4	4	4	4	8	8	8	96	72	4	4	4	—	72	96

* Excluding officers' horses.

The divisional unit in peace need be little more than a cadre, consisting of officers, N.C.O.'s, and a few men, with a complement of horses, to provide (a) an instructional staff for training the recruits of the field troops at the dépôt in drill, musketry, military engineering, and equitation; and (b) a staff for looking after the mobilisation equipment of the unit. The remainder of the personnel required on mobilisation would consist of reservists of the field troops.

RUSO-JAPANESE WAR.—IV

By COLONEL W. H. BIRKBECK, C.B., C.M.G.

OPERATIONS SUBSEQUENT TO THE BATTLE OF MUKDEN.

THAT the Japanese plan of campaign ended with the battle of Mukden and the advance to Tiehling may fairly be deduced from the two significant facts that they had no maps of the country north of the latter place, and that they were totally unaware of the value of the River Liao as a line of supply.

The Japanese advance certainly stopped altogether at Tiehling, and the 12th Division of Kuroki's Army which had pushed on through that town towards Kaiyuen on March 16 and 17 was recalled.

On March 20 the positions of the Japanese Armies were as follows :—

3rd Army on the left, along the Liao from Shihfossu to the Chuchusan Hills.

4th Army at Tiehling.

1st Army S.E. of Tiehling.

5th Army near Fushun.

2nd Army Mukden.

Twenty miles northward of Tiehling were the 1st and 2nd Cavalry Brigades, still under Nogi's orders, at Changtufu and Chinchiatun respectively ; in support of them, the 3rd Army had thrown forward to Hokuatzuyen an advanced guard of a regiment (three battalions) of Infantry, a squadron of Cavalry, two batteries, and a company of Engineers.

The Russians had gone clean away to the north, but finding the pursuit was not pressed, they seem to have pulled themselves together, and to have begun sending mounted troops south again.

On March 21 the 2nd (Tamura's) Cavalry Brigade, proceeding along the Taha Road, came in contact with 10 Russian squadrons and a battery moving south near Paolitun.

Tamura fell back on Chinchiatun, whither a battalion and a battery from Hokuatzuyen were sent to support him, and there remained in observation till April 4, when he was attacked by two Cossack Brigades, which, failing to make any impression on the defence, withdrew next morning to Papaotun.

Meanwhile the 1st (Akiyama's) Cavalry Brigade, advancing cautiously up the Fenghua Road, had occupied Tzuliushu on April 8, driving out a troop of Russian Cavalry.

On April 5 they repulsed the attack of a few Cossack squadrons supported by Infantry, but on April 8 they had to withdraw in haste before the advance of a Russian mixed force (estimated at a Brigade of Cavalry, a Brigade of Infantry, and guns) to Changtufu, which had been occupied by a battalion and a battery from Hokuatzuyen.

Next day the Russians surrounded Changtufu, pushing on down the railway as far as Machengtai, but the Japanese stood fast behind their entrenchments, and on April 11 the Russians withdrew, leaving only a few squadrons in touch with Akiyama's Cavalry about Changtufu.

The 2nd Brigade had meanwhile left Chinchiatun and withdrawn across the Liao at Hsiao-ta-tzu, leaving a battalion of Infantry with guns in occupation of Sanchiatzu. The Cossacks followed up to Sanyencheng, where their advanced guard was surprised on the night of the 15th by the Infantry from Sanchiatzu and driven back with considerable loss.

Next day Sanchiatzu was attacked by two full Cossack Brigades; securely entrenched behind the mud walls of the village, the garrison stood firm, and on the 17th Tamura recrossed

the Liao with his Cavalry and threatening the Cossack left from the direction of Liangchiatzu forced them to withdraw.

The Headquarters of the 2nd Cavalry Brigade were again established at Chinchiatun, a detachment occupied Liuchiatzu, and reconnoitring patrols were once more pushed up the Taha road to Paolium.

At the end of April, the 3rd Army moved up to the line Kang-ping-hsien—Chinchiatun, occupying the rayons shown on the map.

The 7th Division on the left had an advanced detachment at Ssu-tzu-yueh consisting of a regiment of infantry, a squadron of cavalry and a company of Engineers; while the 9th Division on the right supported the 2nd Cavalry Brigade at Papaotun with a regiment of Infantry and a company of Engineers.

The 2nd Army came up on the right of the 3rd Army, and Akiyama's Cavalry Brigade at Tzuliushu was again transferred to General Oku's command.

The armies then stood from left to right as follows :—

3rd Army, astride the Liao on the line Kang-ping-hsien—Chinchiatun, its left resting on the frontier of neutral Mongolia.

2nd Army, on the line Chinchiatun—Changtufu extending as far as the railway.

1st Army, east of the railway with its right thrown back to join the 5th or Yalu Army in the hills 20 miles N.E. of Fushun.

4th Army, at Tiehling.

The whole front was covered by an almost continuous line of fortifications, held by the outposts, beyond which were the advanced detachments securely entrenched in the mud villages, which lent themselves admirably to defence.

The lines of supply were the railway and the Liao, of which the latter was by far the most effective: the railway capacity never rose above 16 trains of about 100 tons each per diem, but the river, though at first used tentatively and for the supply of the 3rd Army alone, soon developed a traffic of nearly 3000 tons daily, so that by the end of the summer each Army had an

average of six weeks' food reserve in Army charge, *i.e.* in front of the advanced depôt of Tiehling.

The Russians held a similarly fortified line some 30 miles to the North of the Japanese positions; but though the mounted troops were constantly in touch, and the summer of 1905 was marked by several affairs of outposts, no serious engagement took place, for both sides were employing the time in perfecting their organisation, drilling recruits, and making ready for a third winter's campaign.

The forward movement of the Japanese left from the Liao to the neighbourhood of Kang-ping-hsien was evidently soon reported to the Russian Commander, for, from the beginning of May, the Russian Cavalry were observed to be active along the whole of Nogi's front, while supporting infantry were reported at Taha, and also N. of Liaoyangwopeng, to which latter point the mass of the Cavalry seemed to be gravitating.

The movement culminated in Mishchenko's Second Raid, May 17 to 24.

His orders were to locate the Japanese left, and get in rear of it, doing all the damage possible to their magazines, convoys, and lines of communication.

With the Yingkow raid in his mind, General Liniewitch added, 'avoid serious encounters, especially with troops entrenched, but if you meet the enemy's Cavalry in the open, close with them, and ride them down.'

Leaving Liaoyangwopeng on the morning of the 17th, with two Cavalry Divisions and guns, Mishchenko sheered off to the westward round the Japanese outposts, and on the 18th appeared in rear of their left flank S.W. of Kang-ping-hsien, capturing two Field Hospitals established on the shores of a lake six miles from the town.

Santaitzu, a post on the Fakumen road, was threatened, but in pursuance of orders Mishchenko resisted his inclination to attack entrenchments, and moving on bivouacked at Fang-chiatun.

On the evening of the 19th the Russians bivouacked at Tashantzu, their left having passed by Kungchuling, within a few miles of Nogi's Headquarters at Fakumen; Mishchenko had made only fifty miles in three days, but he had located the Japanese left, and was now on one of their lines of supply, *i.e.* Hsinmintun—Fakumen road.

On the afternoon of the 19th all was bustle in Fakumen, the Headquarters of the 3rd Army; General Nogi was supplied from four points, *i.e.* from Hsinmintun by the Hsinmintun—Fakumen road, from San-miao-chuang on the Liao 25 miles south of Fakumen, and from the two up-river ports of Hsiaotatzu and Tung-chiang-kou; Mishchenko was already right on his communications, and hasty arrangements were made to localise the raid.

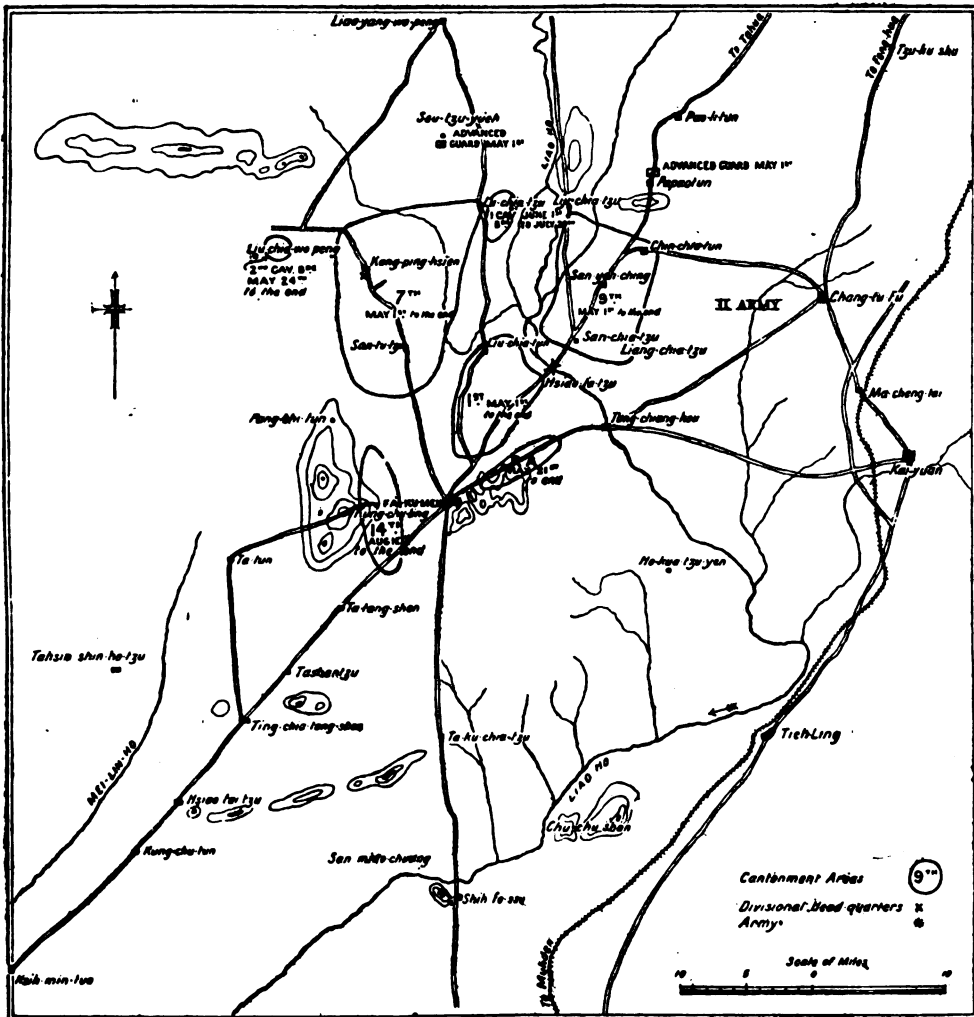
Hsinmintun and the posts on the road were warned, and the Officer Commanding the Reserve Regiment at Takuchiatzu on the San-miao-chuang line was directed to put out a line of posts along the ridge towards Hsiaotaitzu. The 2nd Cavalry Brigade from Papaotun was ordered to the S.W. of Fakumen, and a small column of five companies of Infantry of the 1st Division left Fakumen at night-fall to attack Mishchenko's bivouac, supposed to be near Kung-chu-ling.

Early next morning (May 20) this column, which failing to find Mishchenko had turned south, entered Tafangshen, closely followed by a battery sent out from Fakumen to support it.

Mishchenko fell into temptation—occupied villages were more than he could resist. One of his Brigades attacked and took Ting-chia-fangshen, destroying two companies and capturing two machine guns, and moving on southwards came to a stop before the Takuchiatzu Regiment's posts.

Mishchenko himself, with two Brigades and guns, attacked the column whose entry into Tafangshen had been reported, and was repulsed with heavy loss; while the 4th Brigade succeeded in pushing a Regiment through the Takuchiatzu line, and cutting up a convoy near San-miao-chuang.

The whole force came together again that night and bivouacked near Hsiaotaitzu, after a comparatively fruitless day's work.



Meanwhile, on the Japanese side, the Cavalry Regiment of the 1st Division reached Tafangshen at 1 P.M. and late in the afternoon the 2nd Cavalry Brigade from Papaotun arrived at Tatum.

Next day, May 21, the Cavalry Brigade and the Tafangshen
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Y

force, now a formidable column of all arms, joined hands at Ting-chia-fang-shen, near which place they had a successful skirmish with some Cossack squadrons, but Mishchenko declined the contest; finding himself opposed everywhere he had turned north again, crossing the Meilin-ho, and bivouacked that night at Tahsinshuikotzu.

On May 22 Tamura's Cavalry Brigade moved up the left bank of the Meilin, parallel with, and in observation of, the Russian march, and spent the night at Fangchiatun. Continuing their movement on the 23rd the Russians finally regained their lines on the 24th, making a wide detour into Mongolia to clear the left of the Japanese 7th Division, which had extended to cut them off.

Mishchenko lost twelve officers and 174 men killed and wounded, and, including the Field Hospital, took back with him five officers and 234 men prisoners and two machine guns.

He certainly fixed the position of the Japanese left, but the damage to their lines of communication was insignificant; the magnet of entrenchments had again proved too strong for Cavalry trained to fight principally on foot, and the furthest point reached in four days—Hsiaotaitzu—was only 60 miles from Liaoyangwopeng.

Here again it is suggested that the Japanese Cavalry Brigades were not wisely placed at Tzuliushu and Papaotun. Neither Brigade was strong enough to *push* reconnaissance through the opposing screen, and could therefore effect nothing more than patrols of the Divisional Cavalry, while the open plains of Mongolia on the left seemed positively to invite to enterprise the large force of Russian Cavalry known to be collecting at Liaoyangwopeng.

After the raid Tamura's Brigade remained on the left flank of the Army at Luchiawopeng, and on June 1 the Akiyama Brigade was again assigned to General Nogi, who sandwiched it in between the 7th and 9th Divisions, on a front of some five miles in closely wooded country unsuitable for Cavalry, and there it remained till the middle of July.

The middle of June witnessed a very timely and successful operation by the Japanese Cavalry against Mishchenko.

Hearing that the latter was meditating another Raid, General Nogi determined to anticipate him, and on the night of June 16 sent out the two Cavalry Brigades from Liu-chiatzu and Luchia-wopeng respectively, each supported by a Regiment of Infantry and guns, to advance concentrically on Liaoyangwopeng and harry Mishchenko's headquarters.

Akiyama's column rendezvoused on the outpost line at 10 P.M. on the 16th in a heavy tropical thunderstorm which made the roads almost impassable, the water in one place being knee deep for more than a mile; moving off, preceded by an Infantry advanced guard, the force reached the Russian outpost line at 1.30 A.M., and deploying lines of Infantry skirmishers on both sides of the road with Cavalry and Horse Artillery well out in advance of the right flank, pushed right on to Liaoyangwopeng, which they occupied by 8.30 A.M., capturing the supplies, clothing, sick horses and other accumulations at the headquarters of a large Cavalry force, as well as General Mishchenko's baggage and headquarter office.

Surprised, the Russians made little opposition to the advance, and the results would have been infinitely greater had Tamura's column come up on time; delayed by floods it only reached Liaoyangwopeng when the action was over.

Both columns withdrew behind their main outpost line by the evening of the 17th, and the ruins of Liaoyangwopeng were again occupied by the Russian Cavalry.

The moral effect of this assumption of the offensive had the desired result and Mishchenko's contemplated third raid was abandoned.

In the middle of July Akiyama moved across to join the Tamura Brigade at Luchia-wopeng, where a Cavalry Division was formed composed of the 1st and 2nd Brigades and some fourteen Divisional Squadrons, making the considerable total of thirty squadrons with guns and machine guns complete.

Opposed to them were two Divisions of Cavalry under Mishchenko, with whom they skirmished almost daily till the armistice was signed.

On August 16, the new 14th Division arrived to join the Third Army, and was quartered in and around Kungchuling, while the new 15th Division joined the Second Army about the same time.

The Peace Conference met for the first time in Washington on August 9, and the Treaty of Peace was signed on September 5.

Though at first the terms of peace were not popular in Japan, there is no doubt her Statesmen were well advised to accept the Russian overtures.

The campaign had lasted eighteen months ; the freedom of Korea from Russian aggression was assured ; Port Arthur was won and with it the undisputed command of Eastern waters ; a blow had been struck at Russian prestige in Eastern Asia from which they could never recover ; but with it all, Japan was no nearer Russia's vitals than at the beginning, she was only nibbling at her enemy's extremities, and that is not enough to *compel* a peace or exact a large indemnity.

Had the war been continued, it is possible that the Japanese would in two years' time have crossed the Sungari and reached Harbin, but at what a useless cost of blood and treasure, for even then they would not have been appreciably nearer to finality than before.

Supply by an ever lengthening and slender line of communications would have been difficult, slow, and very costly ; for the head of navigation of the Liao was already reached, and any further advance would be dependent on the single line of railway and the so-called roads of Manchuria.

There were still men in plenty, though the standard of physique had been lowered, but the shortage of trained officers was distinctly felt ; and the financial strain was telling.

So peace was wisely made with something left in hand, with credit still good and financial resources available with which to

reap the peaceful fruits of victory ; and Japan has now settled down to consolidate her position, to develop her commerce, and to make money which was the one essential to success in war she lacked—of the rest she already has abundance, brains, method, ships, and men, and, above all, a courage and a patriotism to which Europe can show no parallel.

‘We talk of Peace and Learning, and of Peace and Plenty, and of Peace and Civilisation ; but I found that those were not the words which the Muse of History coupled together ; that on her lips the words were Peace and Sensuality, Peace and Selfishness, Peace and Death. I found, in brief, that all great nations learned their truth of word, and strength of thought, in war ; that they were nourished in war, and wasted by peace ; taught by war, and deceived by peace ; trained by war, and betrayed by peace—in a word that they were born in war, and expired in peace.’—RUSKIN.

IMPORTANT

The Staff of the Journal is very limited, and it is therefore necessary for all officers who obtain the Journal direct from the Managing Editor to report any alteration of rank or address immediately, as it is quite impossible to follow up the stations of individual officers : every effort will, however, be made to trace the moves of regiments.

A REMARKABLE CAVALRY RIDE

By LIEUT. BERTRAND STEWART, *West Kent (Q.O.) Yeomanry*

DURING the war between Prussia and Hanover in 1866 the Hanoverian Regiment of Queen's Hussars received orders to proceed by a forced march from Lüneberg to Göttingen by way of Nordstemmen, near Hanover.

The actual rendezvous at Lüneberg was about an hour and a half's ride from where most of the regiment were billeted, but in spite of this fact, and notwithstanding that the orders for the march were only received during the night of June 14-15, the regiment paraded, about 350 strong, at 9 A.M. on the 15th.

They marched *via* Nelzen, Celle, and Lehrte, to Nordstemmen, and arrived there at 1.30 A.M. on the 17th—a distance of $99\frac{1}{2}$ miles in $40\frac{1}{2}$ hours. This was exclusive of the distance covered in the $1\frac{1}{2}$ hour's ride from the men's quarters to the rendezvous near Lüneberg, and also that covered after arrival at Göttingen. At Nordstemmen the regiment was at once entrained for Göttingen, a journey of $1\frac{1}{2}$ hour's duration, and then marched to their billets in the surrounding villages.

The general arrangements of the march were as follows:—

Each halting-place was decided on beforehand, and a telegram sent to the local authorities from the previous halting-place instructing them to prepare the men's and horses' feeds. These, however, only consisted of their ordinary rations.

The average distance covered in each hour of actual marching was $4\frac{1}{3}$ miles, and each halt lasted on an average 4 hours, during part of which the men slept beside their horses.

The stages of the march were as follow :—

- June 15. Left Lüneberg, 9 A.M.
Reached Nelzen, 2.30 P.M. = 22 miles in $5\frac{1}{2}$ hours.
- June 15. Rested at Nelzen, 2.30 P.M.—9 P.M. = $6\frac{1}{2}$ hours.
- June 15–16. Left Nelzen, 9 P.M.
Reached Celle, 7 A.M. = $32\frac{1}{2}$ miles in 10 hours
(feeding on the way at Eschede.)
- June 16. Rested at Celle, 7 A.M.—1 P.M. = 6 hours.
- June 16. Left Celle, 1 P.M.
Reached Lehrte, 5.30 P.M. = $22\frac{1}{2}$ miles in $4\frac{1}{2}$ hours.
Rested at Lehrte, 5.30 P.M.—9 P.M. = $3\frac{1}{2}$ hours.
- June 16–17. Left Lehrte, 9 P.M.
Reached Nordstemmen, 1.30 A.M. = 22 miles in $4\frac{1}{2}$ hours.
- Total :—Marching, $24\frac{1}{2}$ hours ; resting, 16 hours.

On arrival at Nordstemmen the entire regiment was at once entrained.

During the whole journey only one horse fell out of the ranks. The march was the more remarkable inasmuch as it was undertaken at a moment's notice and, with the exception of about fifty spare horses which were entrained, none of the animals which took part in it were in any sense specially chosen—which says a good deal for the condition and training of the Hanoverian horses.

The most interesting point to Englishmen about the whole performance is the fact that it was practically a Yeomanry regiment which made the march ; for in 1866, as for more than a hundred years previously, the Hanoverian Cavalry was organised on voluntary and territorial lines.

There were six regiments of four squadrons each, *i.e.*

Two of Cuirassiers,
Two of Hussars, and
Two of Dragoons,

but in each squadron there were usually only from twelve to twenty-five men on permanent duty.

The men enlisted for ten years, and were allowed to re-engage for three or five years. Before a man enlisted he had to produce a certificate that his father or brother could, when he was on leave, keep a horse and supply it with hay and straw, provided the Government, in accordance with their regular custom, gave the oats or the equivalent in money. Townsmen were only taken as recruits in very special cases.

After $1\frac{1}{2}$ year's service the men were granted eight months' leave of absence annually, on condition that they took their horses with them. They were allowed to ride the horses as much as they liked, but never to drive them or use them for farm work.

While on leave of absence they attended a parade once a month in the nearest town, where their horses were inspected by Cavalry officers.

The young horses and recruits were always kept fit by exercise in the barracks from October to spring, and joined their squadrons as they came up for training.

Squadrons came up for a month's training, one in January, the next in February, and so on till in May the whole regiment was called out, exercised, and manœuvred together for a fortnight or three weeks. As each squadron had been thoroughly trained in the previous months, this short regimental training was considered sufficient.

TAMING A COLT

By LIEUT.-GENERAL R. S. S. BADEN-POWELL, C.B.

OUT in the middle of the square of the Artillery barracks was a small group of men calling up all the usual pack of barrack dogs to join in a rat hunt which was about to be provided from the wire trap brought out by the stable guard from a dark corner of the building. From the dogs, the men, and the barrack square one might well have imagined oneself in one of our old barracks in Ireland, but two things made it different. Above the barrack roofs towered up great snow-capped mountains, and in another corner of the square an equally interesting sport was going on, although perhaps not so unusual a one among the men of that place—namely, the taming of a colt. The scene was actually in Chile, on the far side of the Andes, near Santiago, but the Chilians are aptly called the British of South America, and both in appearance and characteristics they are not far off being Irishmen. They are brave and cheery fellows—they would rather fight than eat any day of the week—and they are good horsemen.

After reading the account in the last CAVALRY JOURNAL of the method adopted in India for breaking in a remount, it is interesting to see the methods adopted by the Chilian roughriders. They seem far simpler and perhaps equally efficacious. The horse, instead of being enclosed in a kind of cage, is fastened with his head alongside a stout post, so that he cannot move in any direction.

The roughrider, a great tall, well built, Irish-looking man, proceeds to saddle and bridle him; but all his actions are marked

with a slow and almost lazy deliberation, and his movements are soft and cat-like, though surprisingly active when required. The notable feature of the case is that the rider has no assistance whatever. He does the whole thing single-handed, and attracts no more attention from the other men than if he were merely grooming his horse in the ordinary way. It is evidently to them an everyday performance.

As a first step he puts down a whole heap of odds and ends on the ground in front of him—little bits of straps, string, stick, rope, and rags, &c. Then out of this jumble he leisurely proceeds to select a small leather thong, and taking it in his hand he squats down by the post on the side away from the horse, staring at its feet. Suddenly, with a quick, darting movement, he reaches out and has its two fore feet hobbled together before it knows that anything is being done. The horse is furious at being caught like this, and struggles and fights to get free, but all in vain. The man is turning his back upon it, knowing well that his tackle will hold, and merely proceeds to his pile and picks out some thongs, and finally a lariat with a running noose at the end. Again he squats down by the post, and then with an immensely long reach he stretches himself out to the horse's hind leg, and, for some reason, the horse stands perfectly still while he slips a hobble round its near fetlock. Then he stands up leisurely and takes up the lariat and gives a slight flick at the horse's side. This starts the horse kicking violently to get rid of the loose hobble. In the midst of his kicking the man suddenly jerks the noose towards him, and in the next second his free hind leg is lassoed, and, holding the lariat with his foot, the man links the two hind fetlocks together with the hobble and lets the noose slip back. Thus tied up the horse cannot move at all. The roughrider then takes up his Chilean saddle—that is, a collection of several blankets, some flaps, and a sheepskin—and throws it lightly on to the arching, writhing back, and then fastens it with a broad cinch, which he draws tight, to the accompaniment of snorts and groans on the part of the vicious but helpless animal.



DOMA DE POTROS (TAMING A COLT).

(SANTIAGO, 1909.)

TO MY
AFFECTION

Then, after a deliberate selection from his pile of odds and ends, the man picks out a piece of cord, which he roughly knots into a halter, with a loop to go round the lower jaw by way of a bit. The horse very properly declines to receive such a thing into his mouth, but the roughrider does not go through the elaborate methods of his brother in India for opening the mouth, but merely takes up a handful of dirt and rubs it in between the horse's lips. This quickly makes him open his mouth to get rid of the grit with his tongue, and enables the extemporised bit to be slipped into its place.

The horse being now saddled and bridled, the man removes the hobbles as neatly and silently as he put them on. Then he returns to his scrap heap and picks out a short strap and a stick about a foot long, both of which he tucks into his capacious belt for use later on. Then he takes out a pair of the great heavy spurs with enormous blunt rowels, which are used all over Chile, and buckles them on. After this he stands for a moment irresolute, looking round everywhere, searching in his scrap heap, feeling in his pockets, until at last one is almost inclined to ask whether one can help him in any way. But eventually he finds what he wants—a dirty little handkerchief. He solemnly blows his nose, tucks his rag back again into his belt, and then turns towards his horse, evidently to carry out the main business of the morning. The moment has arrived !

Catching hold of one ear of the horse, he holds its head firmly while he unfastens the head cord with which it had been bound to the post. Then he leads it a short distance out into the open, and in doing so remarks, very little above his ordinary voice and without looking towards them, that the gentlemen occupied



CHILIAN CAVALRY SENTRY.

in rat-hunting must be responsible should any damage occur to them, and, having given this formal warning, without a smile and very quietly, he proceeds to work on the horse. Still grasping the ear, he draws its head gradually round towards its shoulder, and then suddenly, with a light acrobatic spring, vaults into the saddle. The horse, with its head in this position, seems incapable of moving, and the man slips his toes into the narrow stirrups which belong to this country. Then he lets go the horse's head, and the fun begins.

The horse immediately gives a violent plunge and a powerful kick out, followed by a half-rear and a sudden prop. Then he pauses to think what on earth he is going to do with this weight on his back. But the rider gives him no time to think it out. Smack comes the strap on his flank, which sends all his thinking to the winds and drives him at once into action. He starts with a bound to gallop away from this infliction, but a steady drag on the rope bridle holds him in, in spite of his shaking his head and fighting against it. Stopped in his rush, he tries to rear, but when half way up a sudden punch in the ribs from the great spurs makes him instantaneously change his rear into a kick ; but this has no effect, as the rope bridle keeps his head from getting down sufficiently for him to put forth his full power in that line. His eye roving round in every quarter for a chance of escape sees an open stable door, and in an instant he bounds toward it, but the stableman shuts it in his face, and he can only bump sideways against it. Then he sidles along the stable wall, on slippery cobble stones, trying to grind off his rider's leg, but this only produces more spur on that side and a smack on the side of his head away from the wall, so that he is forced to turn it towards the building. Then he makes a rush for the open across the barrack square, and in the midst of his career he drops his head, tail, and four feet at the same moment, arching his back like a tightly drawn bow, and springs straight up into the air, with a side twist as he comes down for a second bound. On and on he goes, buck after buck, with tremendous strength and

agility, but all his effort has not the slightest effect on the rider above him. There he is, sitting well back, gripping tight with his knees, but not with the lower leg, smacking away with the strap on the horse's flank and apparently enjoying the ride.

The horse, half dazed at his own inability to get rid of this incubus, then stops, panting, to think, but the strap rouses him to action again, and drives him in desperation to try and kick away his load. This having no effect, he rushes for the barrack gate, partly bucking, partly kicking, but his rider leans forward and, with that terribly long reach and armed with the short stick, smacks him on the side of the head and forces him to turn in a new direction. Every time the horse tries to go his own way this long directing arm again forces him to turn from his path. The horse, infuriated at this treatment, strikes at the man's arm with its own fore foot, but only receives a dig with the spur for his pains. Except for the wonderful riding of the man, it is not a pleasant spectacle for a horse-lover to witness; but it has the undoubted effect, in a few minutes, of taming even this wild and vicious type of his kind.

After a few more bucks and struggles it dawns upon the horse that if he goes the way the man wishes he escapes all punishment, and he suddenly obeys. The moment he follows the guidance of the man's arm the stick, strap, and spurs cease their work; the moment he twists round to have his own way they come into play again, and in a short time the horse recognises he is in the hands of a master.

A few minutes more and he is standing trembling, out of breath, utterly beat.

The man dismounts and mounts again without any opposition on the part of the animal. He starts to ride him at a trot; the horse immediately objects, and then bounds forward, when he gets a taste of the strap, and tries bucking once more. This only brings him further punishment. Once more he tries bolting, but again the arm comes round and drives him from his course, in spite of his striking at it with his fore feet, and thus

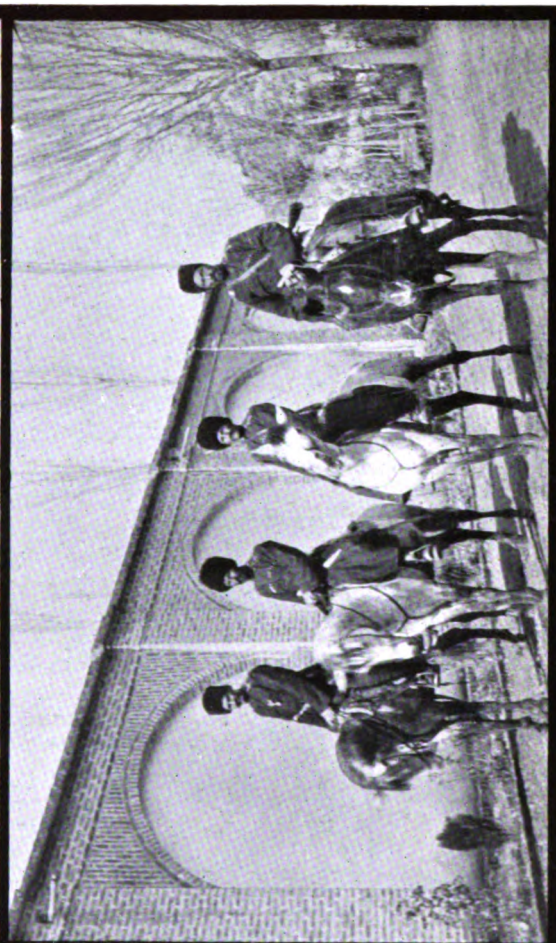
again he learns his lesson that it is best to yield to the hand of his master.

After that there is no more trouble. He walks, trots, and canters in the direction in which he is guided by the rope and the man's pointed finger, and, after a short lesson in this quiet movement, he is taken back to the stable, tamed and ready for the ordinary training of a troop horse.

They told me it was seldom that a horse wants a second day of this kind, and certainly never a third ; that he was completely subdued, however vicious in temper ; but whether he ever makes the really confidential mount that the well-trained English troop horse does, I do not know. Certainly the Cavalry, and especially the Horse Artillery, which I saw working in Chile moved with the best precision and at great speed ; but no doubt much of their excellence was due to the natural horsemanship of the men, who, before they join the army, are all horsemen from their childhood. The only equitation instruction that they have to go through on joining is to learn the form of riding decreed by the German instructors of their army instead of their natural Chilian seat, for everything in that army is done on the German model down to the smallest detail. Both officers and men are dressed and equipped exactly like their brothers in arms in Germany, and pick up much of the smartness and discipline of their instructors.

THE MOUNTED FORCES OF PERSIA.

The men supply their own horses, which are small animals of 13'2 to 14'1 hands. The Cossack Brigade contains the only regular mounted troops in the country, the remainder being tribal horsemen, who, however, are not yet thoroughly organised and disciplined. The tribesman of to-day usually carries a breech-loading rifle, one or more bandoliers, and a short straight double-edged sword, to which a pistol or two is occasionally added. The pattern and bore of the rifle also vary considerably.





PERSIAN HORSEMEN AFTER AN ENGAGEMENT.

(The trophies on the lance points are human heads.)

**SOME ACCOUNT OF THE MOUNTED FORCES
OF PERSIA FROM A.D. 1600 TO THE
PRESENT TIME**

By MAJOR C. B. STOKES, *3rd Skinner's Horse,*
Military Attaché at Tehran

THE existence of a standing Army in Persia may be said to date from A.D. 1600, in which year Persia made the first of many experiments with foreign instructors for her Army, two Englishmen, Sir Antony and Sir Robert Sherley, being the first Europeans who tried to organise the Shah's forces. As one result of their efforts we find that 20,000 men who were first enrolled as Infantry were subsequently 'mounted and armed with matchlocks and a fork to fire from.' In 1612 Sir R. Sherley, who had been on a mission to Europe, returned, bringing with him Captain Thomas Powel, of Hertford, who became Colonel of 700 horse. At this time and for the next two centuries the Persian Army remained for the most part a loose collection of irregular Cavalry contingents. In about 1620 it was estimated by one writer to contain 97,000 Cavalry, while another states that the Shah Abbas I. could raise 300,000 horse and 70,000 foot. Nadir Shah, a century later, was the first to attempt to give Persian Cavalry some sort of organisation. It is interesting to read that of his Army of 160,000 men, soldiers, and camp followers, with which he took Delhi in A.D. 1739, not a single individual was on foot. Both under Shah Abbas and Nadir Shah battles seem to have been little else than desultory Cavalry engagements on a large scale. One writer has compared the fighting of Persian horsemen to that

of Persian dogs, alternately advancing and retiring, snarling, growling and yelling, but rarely coming to close quarters. But whatever their methods of fighting they appear to have possessed considerable mobility, for we read that in 1795 Agha Mahomed Khan marched with his Cavalry from Tehran to Tiflis in fifteen days, or at the rate of about 44 miles a day. Agha Mahomed Khan, the first Kajar sovereign, appears to have revived somewhat the prestige of Persian arms, which languished after the death of Nadir Shah in 1747, but under his successor, Fath Ali Shah, the army was completely neglected. Prior to this the military strength of Persia had consisted in its inexhaustible supplies of light horsemen, furnished by the tribal chieftains, who, on the feudal basis of a military contribution, preserved a nominal independence. Each of the great Khans or Ilkhanis lived in state, and in comparative isolation from the central authority among his own clansmen, keeping large studs of the finest breeds of Persian, Turkoman, and Arab horses, and encouraging the spirit of horsemanship and patriotism among his followers. This system was absolutely broken down by the policy or the fears of Fath Ali Shah, who set himself to disintegrate the authority of the feudal barons with results disastrous to Persia.

At this time, the end of the eighteenth century, a great variety of arms was to be found in the Persian Army, bows and arrows, clubs, lances, swords, daggers, and firearms. Some of the Cavalry carried a carbine, but this was only fired once in an engagement, probably owing to the time required for reloading. Most of the Cavalry were armed with a lance, a long and very much curved sword, 'its cutting edge inside,' a club and a number of weapons attached to the saddle, and two pistols in the belt. Nearly all, even at that time, wore coats of mail, armlets, and steel helmets, while some used small shields. The tribes residing east of the Caspian, Turkomans and Uzbegs, had no firearms, but used light bamboo steel-pointed lances with great effect, and bows and arrows. In the use of the latter they were

also very skilful, both in attack and retreat. When retreating they reclined on the back of the horse, resting their head on the crupper, and while at full gallop discharged the arrow at the pursuing enemy.

At the beginning of the nineteenth century the troops were as a rule quartered in the districts where they had been levied, but to ensure their obedience to the Shah's commands either the Chief or his son was kept at Court as a hostage. The principal military force was the Cavalry. The troops were clothed, horsed, and armed at the Shah's expense, and each horseman received pay and allowances amounting to the equivalent of fifty or sixty guineas a year.

In 1807 the French General Gardane, sent by Napoleon, arrived at Tehran with seventy officers and non-commissioned officers to train the Persian troops. One of the Mission, M. Tancoigne, writing in 1808 says: 'The great strength of the Army consists in the Cavalry. Each province, or rather the great vassals of the Shah, the Khans who are at the head of the military tribes, must furnish a certain number of men, and the total, when the number of tribes and the population of the country are considered, cannot exceed 150,000 or 200,000 men. These military tribes form four great divisions which are named according to the language used by them, viz. Turk-zaban, Kurd-zaban, Arab-zaban and Lur-zaban. The Afshar and Kajar, both Turk-zaban, are the most powerful tribes: the first is reputed to be the bravest and was long the strongest (Nadir Shah belonged to it); but the second, to which the reigning dynasty belongs, has lately deprived it of its eminence. The pay of the Persian Cavalry is trifling, and this they receive only in time of war. They have, however, the benefit of all spoil and booty, very accommodating resources, and admirably favourable to indiscipline. They arm and mount themselves at their own expense and are dressed like warriors of antiquity, a steel helmet, coat of mail, a lance and a shield forming their usual accoutrements. Some of them also carry a bow and a quiver full of arrows, and in short,

were it not for the pistol and carbine which several add to the above equipment, they might be mistaken for the Persians of the time of Darius. This Cavalry does not know how to fight in order and could not withstand the shock of our Regular Cavalry of the line or break our Infantry : it is, however, excellent for turning the flanks of an army and for skirmishing. The Persian swords are much superior to ours in temper, and make wide and deep wounds which are generally mortal.'

General Gardane and his officers left in 1809, and were succeeded in 1810 by a party of British officers and non-commissioned officers from India. They were principally employed in Azerbaijan under Abbas Mirza, the Shah's son, a keen soldier, to whom belongs the credit of the introduction of European discipline into the Persian army. In 1812 Abbas Mirza had in his army at Tabriz a regular brigade of Cavalry 1,200 strong, and a corps of Horse Artillery with twenty field pieces. The Artillery was commanded by a British officer, Captain Lindsay, formerly of the Madras Army, and afterwards Sir Henry Lindsay Bethune, who served in the Persian Army for some forty years, and rose to be its Commander-in-Chief. Abbas Mirza had besides the regular Cavalry some 20,000 irregular horsemen in his army. Colonel Gaspard Drouville, a Frenchman and Colonel of Russian Cavalry who was in Persia from 1816 to 1819, and who formed a regiment of Lancers for Abbas Mirza, has left us the following description of Persian Cavalry at that time :

'The chief strength of Persia consists of Cavalry, which is always three or four times as numerous as their Infantry. The first class of Cavalry is the Kizilbash or irregular Cuirassiers. These number 20,000, distributed over the empire, and 4,000 of them are always near the person of the King in the field or on the march. They are reputed very brave when fighting against the Turks, but as they have never met European troops they cannot accustom themselves to guns, the noise of which upsets them and throws them into utter confusion. They are all very well mounted on Turkoman horses. They never use firearms, and use

only the lance and sabre. As defensive armour they have gilt iron helmets, from which are suspended steel chains which guard their necks and cover their shoulders. Their cuirasses are likewise shirts of mail, the sleeves of which reach only to the elbows, to lessen the weight : the left forearm carries a circular shield, and on the right is a badge ending in an armed gauntlet. The lances they use are very light, the tip pointed, and the shafts are usually of pliant bamboo thirteen or fourteen feet long, and so hard that one can scarcely cut them with a sabre. The Persian Cuirassiers do not hold this weapon as Europeans do, under the right arm, but only in the hand, the wrist raised above the head as if they wished to throw it forward. Against the Turks they only employ this weapon to break the ranks of the enemy until he turns his back : then they use the sabre, with which they are much more redoubtable, for few men can boast of handling a sabre as well as they do.

‘The second class of Cavalry is called Gholams. The Shah’s Gholams, numbering several thousands, are chosen from the flower of the Persian youth. The Princes also have their own Gholams. They are all mounted on Arab horses and form the Body Guard of the King in the field. They are exercised continually, and are wonderfully skilful. All arms are familiar to them, but against the enemy they use only the carbine, the pistol and the sabre. Their pay is not fixed and depends entirely on the will of the Sovereign.

‘The third class of Cavalry, the most useful, is that of the Gholam Tufangchis (Mounted Riflemen). They are organised, mounted and armed like the Gholams, and are, like our European Dragoons, intended to move rapidly to some point, there to dismount and fire ; consequently, instead of carbines they have long muskets with rifled barrels, at the end of which are wooden forks to support the musket when aiming. Some hold the horses while others advance to skirmish : the position they then adopt is an awkward one, and one must learn by long habit to adapt oneself to it. Instead of firing standing, they squat or kneel, bending

sufficiently for the barrel of the musket, which rests on the fork, to be parallel to the ground and two feet above it. When circumstances demand it they mount and charge the enemy, when they rival in valour, impetuosity and skill the Gholams, with whom they often act on these occasions.

‘The next class of Cavalry is the Provincial Cavalry, called “atly” (Turkish for “horsemen.”) They are very numerous and form nearly the whole of the forces of the Empire. Their arms are not uniform, some carrying firearms, others lances. They are badly mounted compared with the other classes of Cavalry mentioned above, but are brave and keen. The “atly” of the province of Urmia, composed of Afshars, are, however, an exception, and are well mounted and well armed and have a great reputation. Those armed with carbines and those armed with lances are kept in separate squadrons. The weapon they use best is the javelin. This is a single piece of iron three and a half feet long, one end being a three-faced blade like a very sharp lance, the other having two projections or buttons six inches apart. The Afshars always carry two of these javelins in a sheath placed almost horizontally under the right thigh, and very tightly attached by a double girth. The Afshars hold the javelin in the middle, and swing it perpendicularly from front to rear without aiming at the object they wish to hit. They only raise it above the head and hold it horizontally when about to make the movement required to throw it. One is astonished to see the accuracy with which they throw this weapon to a distance of more than forty paces at full gallop. Most of the horsemen do not dismount to recover their javelins, but pick them up from the ground at full gallop with marvellous skill. The Turks, to avoid these missiles, lie close on their horses and, looking behind them as much as the position permits their doing, hold out one arm behind to try and turn the javelins with their sabres, which they very rarely succeed in doing.

‘The regular Cavalry, called “Nizam-atly,” is composed of twenty squadrons, of which four are armed with lances and one with carbines.

‘The regular Cavalry is organised entirely on French lines, and may be said without fear of contradiction to rival in everything and for everything the best in the world. The men who compose it are chosen from among the bravest in Persia; they are all mounted on Arab or Turkoman horses which are the very best known for war: they have kept their own saddles, on which they ride better than on any others, the only change being the substitution of Hussar pattern stirrups for Oriental ones. They have likewise been given spurs, which were hitherto unknown to them, and which have often annoyed them because, being in the habit of sitting on their heels and forgetting their spurs, they run the rowels into their thighs. Each man is armed with a lance, with a crimson pennon and a sabre, in addition to having a pistol attached by a ring on the butt to a lanyard long enough to allow of firing the pistol without detaching it. The lances are made on the European model, except that the shaft being longer and lighter they are easier to handle. Some of the sabres are of English manufacture, being a present to the Prince Royal from General Malcolm. The uniform of the Lancers is a jacket of sky-blue cloth, collar and facings crimson, white belts. They wear, as do all Persian regular troops, the national head-dress, which it has been found impossible to get them to change.’

The same writer in another passage says: ‘The Shah was so pleased with the evolutions of the Cavalry that he used to keep them as a rule doing evolutions from 8 A.M. to 3 or 4 P.M. without a moment’s rest, men and horses being tired out. Nothing pleased him better than charges and changes of front at a gallop. He was so pleased with what he saw that he ordered the immediate formation of twelve more regiments of Lancers.’

Of the manner of fighting of the Kurds he gives the following description: ‘When the Kurds are in presence of the enemy and have to execute a charge, each man gets ready, examines his arms and sees that all is in order with as much coolness as if going to a picnic. Then the Mullahs of each tribe traverse

the front of the line brandishing an axe in the right hand and with the left beating a small drum attached to the arch of the saddle, and crying out all the time "Allah!" At this signal the whole line moves forward and the priest who leads it often strikes the first blow. Each man is armed with a lance, a dagger, a pair of pistols and two sabres, one of which hangs at the side, the other being passed horizontally under the girth of the saddle and is only used when the first is broken, which happens often enough when they have to be used against helmets, cuirasses and coats of mail. The principal distinction accorded the Kurds is the right to wear in the turban a peacock's feather for each enemy they have killed; many have their heads covered with them, and I once counted nine on the turban of a young man of twenty-five.'

A member of the Russian Mission to Persia in 1817 thus describes the reception of the Mission near Erivan by 4,000 Cavalry: 'The greater part of the troops consisted of Kurds who are known to be a very brave people serving in Persian pay. The General galloped up and down the front of the line. It was a singular sight. The horses were fine and even richly equipped. The men, particularly the Kurds, looked at a distance like disorderly old women; they stoop very much when on horseback, are covered with a quantity of silks of various hues, and their heads are also wrapped in a very awkward manner in cloths of all colours, the ends of which are gaudily fringed. Under this ridiculous head-dress peeps forth a swarthy moustached face, compared to which that of the famous Abellino was beauty itself. The whole line growled most frightfully, and their discordant noise was relieved by two small kettledrums and several squealing fifes. Their principal weapon is a lance of cane. Like the Persians, they pursue each other and with great skill hit their adversaries at full gallop. Their muskets, pistols and sabres are made of extraordinarily fine iron; they can load with great quickness whilst at full gallop and frequently hit their mark.'

Elsewhere he says : ' The Kurds formed into several divisions and attacked each other. Their quickness in loading their firearms and their remarkable dexterity in managing their horses are really admirable. Their favourite method of attack, however, is with the lance, which they raise very high, swinging it powerfully in order to increase the impetus with which they dart it at their adversary. They have no notion of saving their horses ; and they stop them whilst at full speed with such violence that one expects to see them thrown on their backs ; they twist them round suddenly and gallop back with the same speed. It is therefore not surprising that horses in Persia should generally be weak in the legs. The Persian breed is very highly extolled. The horses have long necks, carry their heads stretched out before them, have narrow chests and long legs, but they are very slack-mettled and easily managed.'

Describing the reception of the Mission near Sultanieh, the Shah's summer quarters, the same writer says : ' Within half a day's march of Sultanieh our cavalcade was joined by the Vali of Kurdistan, who advanced at the head of several thousand Kurds to welcome the Ambassador. These men were much better equipped and more expert horsemen than those whom we had seen at Erivan and Tauris. Many of them were finely arrayed in coats of mail, and had all the appearance of ancient knights ; they were mounted on Arab horses and provided with lances. Some of them wore on their helmets a number of plumes, each of which, it was said, had been granted to them in return for an enemy's head. I counted as many as five on some horsemen. It is curious that the horses share in the honours of their riders and carry as many feathers as the latter.'

After 1819 the British officers gradually left the Persian service, and the outbreak of war with Russia in 1826 found the Persian Army very ill prepared, and though at the beginning it scored some successes, the tide soon turned, the Persians were defeated, and Tabriz was entered by Russian troops in November 1827.

Some idea of the numbers of the Persian irregular Cavalry at this time is got from the following extract from a contemporary writer : 'The Persian irregular troops are composed of the nomad tribes, and there are fifty tribes numbering 489,600 families, viz. 15 Turk with 92,000 families, 18 Kurdish with 149,600, 9 Lur with 157,000, and 8 Arab with 41,000 families. Every five families being obliged to furnish one armed horseman, Persia's irregular Cavalry consists theoretically of 87,900 men, but this number can be increased considerably. Since the introduction of regular Infantry the irregular Cavalry has been somewhat neglected and has, in consequence, much declined in efficiency. The Kurds make the best Cavalry. The Gholams, who form the Body Guard of the Shah and other members of the royal family, number about 8,000, the Shah having 2,000 and Abbas Mirza 1,800.' Of these Gholams it is also recorded that they were 'distinguished by an excessive richness of dress and insolence of behaviour.'

In 1834 a second detachment of British officers arrived at Teheran, one of whom, Lieutenant Farrant, was sent to Zenjan to form a regiment of Lancers. He seems to have raised a very serviceable body of about 100 men, who 'after having been nearly starved to death were sent back to their homes because their keep would cost £4 daily.' To pay them 'would have made the rest of the army jealous.'

Colonel Stuart, who saw them in 1835, some four months after they were raised, writes that they wore red jackets, loose blue trousers and Persian caps. They were armed with swords, holster pistols, and lances with red and blue pennons. Their horses were strong and in fair condition. The same writer, describing a review of some horsemen by the Shah, says :

'Among them were a hundred Kurds sent by the Vali of Senna. Lances, swords, and pistols are their offensive weapons ; most of them carry small circular shields slung on the left side of their saddles. The ten leading horsemen wore shirts of chain armour under their shawl surcoats ; their steel head pieces,

pointed at the top and adorned with peacock's feathers, were half concealed by shawls wound round them, with the ends falling gracefully over their necks. They passed in single file before the Shah, to whom they bowed till their heads touched their horses' manes ; but their bold, daredevil countenances were expressive of the strongest contempt for the whole *attirail* of Court and regular troops. These Kurds were in general poorly mounted.'

In 1834 Fath Ali Shah died and was succeeded by Muhammad Shah, who two years later marched against Herat. This led to a diplomatic rupture with England, and when finally Sir J. McNeill, the British Minister, hauled down his flag and quitted Persia, all British officers were ordered to go also. The Army appears to have been neglected during the reign of Muhammad Shah, 1834 to 1848, but in 1850 his successor, Nassir-ud-din Shah, acting on the advice of his Prime Minister and Commander-in-Chief, Muhammad Taki Khan, introduced some reforms. Twelve thousand five hundred irregular Cavalry were kept in a state of efficiency so as to be ready for immediate service when required, and 750 Shahsavan horsemen were formed into a regiment of regular Cavalry. In 1851 a small number of Austrian officers were engaged to train the Persian Army, but they were much hampered, and the Austrian Cavalry officer, Nemiro, was unable to do more than get a few squadrons fitted out with uniform, though he was apparently eight years in the country. The popular idea among Persians was that the coming of Europeans to teach riding and fencing was an impertinence. Other detachments of Austrian officers followed, but, as far as the Cavalry is concerned, there is no trace left of their work. In 1879 the first Russian mission, composed of Colonel Demantovitch, four commissioned and five non-commissioned officers, came to Tehran to instruct the Persian Cavalry. A regiment of 400 to 600 men was soon organised, and in 1880 a second regiment was formed, the two together being known as the 'Cossack Brigade.' In the present organisation of the Brigade all arms are represented. The mounted men bring

their own horses, which are small animals of 13·2 to 14·1 hands. The Cossack Brigade contains the only regular mounted troops in existence in Persia. Russian officers have come in successive batches at intervals of three years, and have undoubtedly succeeded in instilling into the Brigade a military spirit and discipline not to be found elsewhere in the Persian Army.

As far as the tribal horsemen are concerned there appears to have been little or no attempt to organise them. Large numbers of them would probably still be forthcoming, though it is to be noted that horses are neither as good nor as numerous among the tribes as in days gone by. This is accounted for by the general impoverishment of the tribes brought about by bad government.

The modern tribesman usually carries a breech-loading rifle, one or more bandoliers filled with cartridges, and a short, straight, double-edged sword. Sometimes a pistol or two is added. The pattern of rifle varies: in the north the Berdan is most common, on the Turkish frontier the Martini, while in the south there is greater variety, a Belgian pattern perhaps predominating.

The tribal methods of fighting do not appear to have changed much. The attackers advance at a gallop in the hope of frightening the enemy into flight, but should the latter hold his ground, the attackers content themselves with discharging their rifles from horseback, at some distance from their foe, and retiring as rapidly as they advanced.

This article does not attempt to give a complete account of the tribal forces of Persia. Indeed many tribes, e.g. the Bakhtiari, perhaps the most prominent at the present time, the Kashgais and others have not been mentioned. These and others contain plenty of good raw material, and perhaps in happier days, which it may be hoped are in store for Persia, her irregular horsemen, organised and disciplined, may yet form a useful portion of her forces.

ORGANISATION AND TRAINING OF THE ROYAL CANADIAN HORSE ARTILLERY

By **LIEUT.-COLONEL H. BURSTALL**, *Commanding R.C.H.A.
Brigade*

Organisation.—To explain the organisation of the Royal Canadian Horse Artillery it is necessary first to trace briefly the development of the Royal Canadian Artillery from its formation to the present time.

This force was formed on October 21, 1871, shortly after the English troops had been withdrawn from Canada, the garrison at Halifax excepted.

Two batteries were organised on the above date, designated 'A' and 'B.' and stationed at Kingston and Quebec respectively. Each battery was divided into two parts, a Field Division and a Garrison Division; the Field Divisions each consisting of about thirty N.C.O.'s and men, twenty horses, and two 9-pounder R.M.L. guns, with a Captain in command.

In August 1893 a more symmetrical organisation was adopted, i.e. a Brigade of two 6-gun Field Artillery Batteries and two garrison companies; and on September 1, 1905, the Field Artillery Batteries were formed into the existing Horse Artillery Brigade of two 12-pounder B.L. 4-gun Batteries, which is stationed at Kingston, Ontario.

Establishment.—The establishment for 1908–9 is as follows:

Regimental Staff of 61 all ranks, with 8 horses.

Two Batteries each of 173 all ranks, with 130 horses.

The Brigade total thus being 407 of all ranks, with 268 horses.

General Training.—The R.C.H.A. is trained both as Horse and Field Artillery, for as the *raison d'être* of the Permanent Force is Instruction, and as there are 25 Batteries of Canadian Field Artillery (Active Militia), the R.C.H.A. must not only maintain its own efficiency as Horse Artillery, but constantly turn out as Field Artillery for the instruction of officers and N.C.O.'s of the C.F.A., who are doing Instructional Courses at the Royal School of Artillery.

The R.C.H.A. and the Royal School of Artillery are so closely interwoven that the organisation of the latter must be explained.

The Royal School of Artillery.—The Royal School of Artillery consists of a Commanding Officer, who is also the O.C. R.C.H.A. ; an Adjutant, who is likewise the adjutant of the R.C.H.A. ; and a Gunnery Instructor and seven N.C.O. Instructors, who vary in rank from Regimental Sergeant-Major to Battery Sergeant-Major Instructor.

Officers and N.C.O.'s belonging to the C.F.A. attend the R.S.A. for courses of instruction which vary from ten days to three months, and at the termination of the course they are examined for promotion.

All officers of the C.F.A. must qualify at the Royal School of Artillery for each step of rank, but there is no hard-and-fast regulation as regards N.C.O.'s, who can be promoted without obtaining the R.S.A. certificate, though battery commanders send as many men as possible in order to increase the efficiency of their batteries. R.S.M.'s and B.Q.M. Sergeants of the C.F.A. have as a rule certificates of qualification from the R.S.A.

R.C.H.A. officers, as do all others in the Permanent Force, take the English Army promotion examinations before promotion to the next higher rank.

The horses, guns, and men to complete detachments during courses of instruction are furnished by the R.C.H.A. batteries alternately, the battery thus employed being termed the instructional battery, and the other one the duty battery. Thus,

while one battery is fully employed turning out for and assisting in the instruction of the attached unit (i.e. the officers and N.C.O.'s of the C.F.A. undergoing the course of instruction) the other battery finds all duties and maintains its own efficiency as a Horse Artillery Battery.

Instruction at the Royal School of Artillery is, as a rule, carried on from January 2 to May 31, and from October 1 to December 22. During June, when the Annual Active Militia Training Camps are held, the Officers and N.C.O.'s of the R.C.H.A. are sent all over Canada to act as instructors to the C.F.A. units training at the District Camps.

July and August are generally spent at Petawawa Training Camp, and September is regarded as a leave month in which no instruction is carried on.

It may be of interest to show how the two batteries alternate with each other during instructional courses at R.S.A., Kingston.

It has been found by experience that a battery cannot work continually as an instructional unit all the year round without becoming stale and losing efficiency as a fighting machine; an instructional tour of a fortnight has been found satisfactory, and consequently the instructional and the duty battery change rounds every two weeks. The Gunnery Instructor, who is a Captain holding an Artillery Staff Course Certificate (England), is always under the Battery Commander of the instructional battery, the latter officer being directly responsible to the O.C. R.C.H.A. (i.e. O.C. R.S.A.) for the instruction given. All officers of the R.C.H.A. instruct or lecture in the various subjects.

It will thus be seen that the R.C.H.A. and the R.S.A. Horse and Field Branch are in many ways identical.

Petawawa Training Camp.—This article would not be complete without a brief sketch of Petawawa Camp, which is a piece of waste land on the south side of the Ottawa River about 100 miles west of Ottawa. The ground held by the

Militia Department for a central camping ground covers about 100 square miles, and about a quarter of this area is suitable for Artillery manœuvres.

The R.C.H.A. is in camp at Petawawa for a period varying from six weeks to two months, and here as at headquarters in Kingston they are most of the time identical with the R.S.A.

An outline of the work at Petawawa will perhaps best describe the training. In the first place it must be mentioned that a number of the C.F.A. brigades do their annual training at Petawawa and carry on competitive gun practice at the termination of their training, while brigades which are so far distant that the expense would be very great in moving them intact to Petawawa (in some cases a distance of more than 1000 miles), train at the District Camp of the military district in which they are situated, and send detachments to Petawawa for competitive practice only. As an example, in 1907 five brigades and one independent battery trained and did gun practice at Petawawa, while five brigades trained at their local camps of instruction for twelve days, after which detachments consisting of all officers, two staff sergeants, four numbers one, two range takers, eight gun layers, four signallers, and eight gunners per battery were sent to Petawawa for four days to fire their annual gun practice.

In 1908, on account of the Tercentenary celebrations at Quebec P.Q., all brigades did their annual training at local camps and carried out their gun practice at Petawawa.

The R.C.H.A. supply the umpires, range officers, &c., for C.F.A. gun practice; their Officers and N.C.O.'s are also detailed as instructors and assistant instructors during the training camp and the instructional series of gun practice; and they provide guns, horses, and personnel to complete detachments sent to Petawawa for gun practice by brigades which have performed their annual training elsewhere.

Brigade and Battery Training.—The R.C.H.A. has no defined periods for battery training, as owing to their instructional

duties it is not possible to strike a battery off duty for thirty-six days, and the same applies to brigade training.

The efficiency is maintained while at Regimental Headquarters, Kingston, Ontario, by batteries turning out when not required for instruction, and when at camp at Petawawa each battery has from twelve to fifteen days' training before the test gun practice.

Brigade training is carried out on the same lines, off days between courses of instruction being utilised for brigade work, while, at Petawawa Camp, Mondays and Saturdays are generally available for the brigades to work together.

A maximum of 800 rounds per battery is allowed for gun practice, 100 rounds of which must be reserved for brigade practice.

Gun practice is carried out under service conditions on a tactical idea, and batteries are marked for each series as follows :—

Battery Manœuvre	100	
Fire Discipline	100	
Results of Shooting {	Accuracy in laying . 25	} 200
	Destruction of Target . 50	
	Time, Shell, effective . 50	
	Time 75	

English text-books are in force, and specialists pass the R.A. tests before becoming eligible for extra pay.

The establishment of paid specialists for each battery is, twelve gun-layers, one range taker, four signallers.

Combined Training.—The R.C.H.A., one heavy company R.C.G.A., two squadrons of the Royal Canadian Dragoons, and eight companies of the Royal Canadian Regiment carried out fourteen days' combined training at Petawawa in 1907. These units of the permanent force, comprising some 1400 all ranks, though a very small body of men as compared with those taking part in divisional training in England, put in some very useful work, notably at field firing, when a combined attack on a position

was carried out with live shell and ball ammunition. The defenders of the position were of course represented by dummies, and by careful arrangements on the part of the general staff our Infantry was enabled to get fairly close to the point of assault before the Artillery had to cease fire for reasons of safety.

March and Transport Training.—The 1907 training for R.C.H.A. in 'March and Transport' duties was carried out by marching from Regimental Headquarters, Kingston, Ontario, to Petawawa, a distance of some 205 miles. An allowance was granted for subsistence of man and horse, and supplies were bought at the various halting places by an advanced party proceeding a day in advance. This march from Kingston to Petawawa proved excellent training for all ranks, not only in duties on the line of march, but also in horse-mastership.

In 1908, owing to the concentration of troops at the Quebec Tercentenary, the R.C.H.A. entrained to Petawawa, which was an Artillery camp only, so that combined training could not be carried out. It is understood, however, that in ordinary course the 'combined' and 'march' trainings, as carried out in 1907, will hold.

It may appear that more space has been devoted to describing the training of the Canadian Field Artillery than the work of the R.C.H.A. as a fighting unit, but it must be remembered that the R.C.H.A. exists for the following reasons :—

- (1) For the support of the Civil Power in case of internal disturbance.

- (2) For the instruction of the Active Militia.

- (3) For active service in time of war, whether intact or distributed amongst the C.F.A. brigades called out.

Thus instruction of the Active Militia is the principal work of the R.C.H.A., and on the many points of interior economy, &c., which have not been mentioned it is enough to say that the R.C.H.A. works on the same lines as a Horse Artillery Brigade in England.

WHAT THE FRENCH ARE DOING TO ENCOURAGE THE BREED OF THE SADDLE-HORSE: A VISIT TO THE CONCOURS DE SAUMUR

By LIEUT. CHARLES BRIDGE, *Royal Field Artillery*

AT a time when so much attention is being drawn to the unsatisfactory state of the horse-breeding industry in this country, it is interesting to take note of what the French are doing to encourage the breeding of horses for their Cavalry.

I was fortunate enough to be present in July last at the 'Concours de Saumur'—a horse-show held under the auspices of the 'Société d'Encouragement à l'élevage du Cheval de Guerre Français,' and, before giving an account of what I saw, I propose to outline briefly the objects held in view by this Society.

State Aid.—The horse-breeding industry in France has attained a position of much importance, the aid afforded by the State in the matter of premiums, prizes at races, horse-shows and in other ways being its most noteworthy feature. Though the funds so expended are for the promotion of horse-breeding generally, there is no doubt that the requirements of the Army lie at the root of the whole system.

Unsatisfactory Quality of the Saddle-Horse.—There is a pretty general opinion amongst French military officers that the heavy and medium Cavalry horses ('type cuirassier' and 'type dragon'), coming mostly from Normandy, are of a most indifferent stamp. They are said to be quite unequal to their work, and at the end of a few days' hard manœuvres the regiments are said to be reduced to a state of inefficiency owing to the exhaustion of their horses.

The Light Cavalry are more fortunate, and their horses—light, breedy animals with a large admixture of Arab blood, coming almost entirely from the South—are held to be satisfactory and well suited to the work required of them.

As long ago as 1896, certain French gentlemen interested in horse-breeding began to draw attention to the unsatisfactory condition of the breed of saddle-horses in France; and again, in 1898, the report of the Directeur des Haras stated that on mobilisation a sufficient number of horses for the heavier types

Cavalry would not be forthcoming. Three main reasons were given for what was undoubtedly a very serious state of affairs. These reasons were: (i) The supersession in the North of the riding-horse by the trotter ('carrossier-trotteur'); (ii) The inadequate prices paid by the Remount Department—especially in the South, the home of the light-weight saddle-horse; (iii) The super-production of the thorough-bred.

Seventy years ago was formed the 'Société d'Encouragement pour l'Amélioration des Races de Chevaux en France,' and up till 1870 this Society worked alone and unaided. Since 1870 other societies with a like object have sprung up—'La Société des Steeplechases de France,' 'La Société Sportive d'Encouragement,' and 'La Société de Sport.' Thanks to these societies, there are born annually in France some three thousand thorough-bred colts, and it is from among these that the French should look to find the sires to produce a half-bred horse population, well adapted for saddle work, and sufficiently numerous to meet the exigencies of mobilisation. But this desirable end has by no means been attained.

Normandy and its Carriage-Horses.—From time immemorial Normandy has produced a race of carriage-horses—well known in the carriages of Mayfair—from which the breeders have made large profits. For this reason they are most unwilling to give up breeding this particular type of horse, which, up till quite recently, was undoubtedly of great commercial value. So far from giving it up, indeed, they have actually contrived, with

much ingenuity, to make use of the encouragements offered by the State for the breeding of horses for the Army, to further the production of the carriage-horse. In pursuance of this principle, the Normandy breeder has refused the services of the thoroughbred stallion, the produce of which is most likely to be more adapted to saddle than to carriage work, and which will therefore possess an inferior commercial value.

The Trotter.—The sums spent in France to encourage the breeding of *half-breds* reach a high total. Broadly they are distributed as follows:—

Trotting races	£84,600
Purchase of stallions	£80,000
Prizes at shows to stallions, brood mares, and young stock	£72,160
Prizes for training young horses	£39,320

That is, a sum of £276,080, well over a quarter of a million sterling, is expended annually by the State with the sole object of aiding and encouraging the breeding of half-bred horses.*

Notwithstanding these liberal grants, the efforts of the French breeders of half-breds have not been directed to the production of a riding-horse—for the simple reason that, as will be seen from a study of the above figures, the half-bred *riding-horse* has no chance of participating in the pecuniary advantages so offered. On the contrary, the breeder sees that to reap them he must keep three main objects in view: first, to produce a trotter; secondly, if the trotter fails, a stallion; and thirdly, should neither the first nor the second prove of sufficient excellence, a horse that will sell well for commercial purposes. As in this country, the horses offered to the Remount Officers for purchase as ordinary troop-horses in the heavier Cavalry are those that have not reached the necessary standard; in other words, the ‘misfits.’

* It must be remembered that, in addition to the above, at least £600,000 is spent in the purchase of remounts annually. In fact, the Remount Vote for all services for the current year reached a total of nearly £740,000.

In fact, it is stated, and apparently with justice, that practically all the sums set forth above and all the moral and material advantages accruing therefrom, fall to the trotter or to the issue of the trotter.

From the Norman carriage-horse, freely crossed with what used to be known as the Norfolk trotter, and since by fresh importations of what we now call the English hackney, a particular breed of horse has been evolved, with a high knee action and a heavy shoulder—the last things required in a saddle-horse. In their infatuation for the trotter—it can be described in no other way—its votaries declare that it is not only a first-class carriage-horse, but also a first-class riding-horse, while others maintain that the production of the trotter is necessary to the evolution of the perfect riding-horse.

We can understand, then, why the thorough-bred stallion has been so little employed in Normandy; why, when he has been employed, he has been sent, not to the best but to the worst mares; and why the horse required for the saddle, with long, low action, coming from the shoulder and not from the knee, and with an easy smooth gallop, is practically not bred at all in this part, the cream of the French horse-raising districts. The administration of the Haras in the North has for the last forty years practically proscribed the use of the thorough-bred as a sire, continuing to maintain that trotter stallions, mated with mares having a strong admixture of trotter blood, produce suitable horses for Cavalry remounts. This may sufficiently explain a most regrettable state of affairs—namely, an almost entire lack of sympathy and co-operation between the ‘Administration des Haras’ and the Remount Department.

Formation of the Society ‘du Cheval de Guerre.’—As the result of the observations and discussions of the public-spirited French sportsmen to whom we have already referred, there arose in 1896 a new private society, the full title of which runs, ‘La Société d’Encouragement à l’Elevage du Cheval de Selle et de Guerre Français.’ The Society has in view, as its name

implies, the improvement of the breed of saddle-horse required for the French Army, or, in other words, it encourages, or aims at encouraging the breed of the half-bred, weight-carrying riding-horse.

We must remember that in France there is, to all intents and purposes, one market, and one only, for the riding-horse, and that is, the Army. The French have not the advantage of a national sport—such as hunting and, in a lesser degree, polo—to stimulate the breeding of this stamp of horse. The breeders of such a horse must depend therefore entirely on the Remount Department for their profits.

Its Objects.—We have seen why it is that the Normandy breeders have confined themselves almost exclusively to the production of the ‘carrossier-trotteur,’ a breed which up till quite lately has amply repaid them. But since the advent of the motor car, and the consequent decrease in the demand for carriage-horses, the breeders have been very hard hit, and are in a fair way to see their industry ruined. The Society which we are considering has thus a second object, for, besides endeavouring to provide France with suitable horses for her Army, it is trying also to persuade the Normandy breeder to forsake his no longer remunerative carriage-horse, and turn his attention to the breeding of the saddle-horse, a breed which it is the intention of the Society to encourage by giving handsome prizes and premiums at special riding-horse shows to suitable horses.

Its Difficulties.—It is easy to understand in a bureaucratic country such as France, in which it has become customary for all enterprise to be directed by the State, that private initiative in any form encounters much opposition. The Administration of the Haras, which regards itself as paramount in all questions relating to horse-breeding, greeted the rise of this private society with much disfavour. The opposition offered in many quarters at its inception, and the attacks made upon it in certain sections of the French Sporting Press—notably in ‘La France Chevaline,’

—were very strong, but, nothing daunted, the Society struggled manfully on, enrolling among its members numbers of the élite of the sporting world and many cavalry officers of high rank, and in 1899 it became a firmly established institution.

Its Efforts.—Beginning in a small way, chiefly from want of funds, by offering special prizes for horses shown in the saddle at shows in different districts, its efforts, growing in proportion to its income, finally manifested themselves, in July 1907, in a horse show, the first held entirely under the management of the Society.

'Le Hunter irlandais.'—The boundless admiration of the French for the Irish horse almost amounts to a superstition, and the word 'hunter'—like so many other English 'horse words'—has become firmly established in the French sportsman's vocabulary. To many of limited experience, any horse of rather above average quality with a good forehead, plenty of bone and well-developed quarters, must have arrived direct from Dublin or Cahirmee, while, should he have a short dock and a hogged mane, there is no possible doubt—he must be a 'hunter irlandais,' capable of jumping anything within reason. Small wonder then that, with this boundless and well-merited respect for the Irish hunter breed, the directors of this newly born Society for the creation of an improved breed of saddle-horses should turn to Ireland and Irish methods for its model.

The 'Formula' of the Society.—In no less than eight of the monthly numbers of the Society's Journal are long articles written by Frenchmen, sometimes indeed by Englishmen, all on the subject of Irish breeding. It would take too long to discuss those communications here, but they suffice to show the reason for the most interesting and significant point to be noted in the history of the work of the Society. This is that the entries for their shows, both in 1907 and 1908, were confined *solely* to the issue of *thorough-bred stallions out of half-bred mares*. In fact, this is what the Society calls its 'formula'—it might almost be called its 'motto'—and it is placed conspicuously in the forefront of the Society's programme.

The Reasons for it.—The amount of discussion to which this condition has given rise is enormous, but the Society, in a number of well-written articles, gives four main reasons for its decision.

1. It wishes to encourage the use of the thorough-bred stallion with half-bred mares, a practice which has for so long fallen into disuse in certain districts.

If the trotter, as they assert, does not produce good riding-horses, the thorough-bred is par excellence a saddle-horse, and must therefore be largely availed of to produce his own kind.

2. This, they maintain, is the system so successfully exploited in Ireland.

If the Irish have made such a success of this method, why should not the French in Normandy—a country possessing all the advantages of soil and climate enjoyed by Ireland—do the same thing? Is it ‘snobbism,’ asks the Comte de Comminges somewhat quaintly, to take a leaf out of the Irishman’s book?

3. It wishes to eliminate the trotting element.

So strongly do they realise the necessity of this, that it is for this reason, above all others, that so many cavalry officers, from subaltern to general, have enrolled themselves in the ranks of the Society.

4. A race of half-bred riding-horses—that is, horses possessing both quality and size—does not at present exist in France; it is the object of the Society to produce such a race, so that there may be found in time a number of sires of this class, well fitted to carry on the race without having continual recourse to the thorough-bred.

To those who claim that the issue of a half-bred stallion with a thorough-bred mare should be admitted, the Society gives answer—that, in the first place, this system has not been successful in Ireland. In support of this view, a letter from an Irish dealer is quoted in one of the Society’s journals in which he gives it as his decided opinion that to get a good hunter you must use a thorough-bred stallion and a half-bred mare. ‘If,’ he adds, ‘you reverse the process and use a half-bred sire and

a thorough-bred mare, the stock generally favours the sire and grows coarse with age.' In the second place, the Society asserts that as a rule in all crosses the stallion imparts his shape ('modèle') : the mare her constitution ('sa nature').

Concours de Saumur, July 16, 17 and 18.—To turn to the Show of 1908. The entries were divided into two classes—each class being again sub-divided into two categories, as below :

Class I. Three year olds.

- (a) 15 hands to 15 hands 8 inches (1 m. 54 c. to 1 m. 59 c.)
- (b) Over 15 hands 8 inches (1 m. 60 c. et au dessus).

Class II. Four, five and six year olds.

- (a) Medium-weight ('type dragon').
- (b) Heavy-weight ('type cuirassier').

The first day (July 16) was devoted entirely to the three year olds; the second day to the four, five, and six year olds, the procedure being almost identical in each case.

Examination of Competitors.—Each horse before being allowed to enter the paddocks of the veterinary hospital attached to the Cavalry School, in which paddocks the competitors were assembled, was examined by a board of military veterinary surgeons for contagious or infectious diseases. He then passed to a second board, whose duty it was to identify him by his colour—no attention being paid to marks on legs or face—to check his height as entered in the catalogue, and to receive his 'breeding certificate' ('carte d'origine'), giving the names of his sire and dam, and in most cases that of his dam's sire also. A third board then decided into which category of his class each horse should go. In the case of the three year olds, this was decided simply by the measurement over the withers—in the case of the second class, by the weight he was fit to carry. The object of this being of course that a three year old is not held to be sufficiently developed to make it possible to class him according to his weight carrying capabilities.

The actual judging took place in the 'Carrière du Carrousel, a sandy arena situated behind the main building of the Cavalry School, some 200 yards in length by 60 yards broad. A full

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day was devoted to each class—Category (a) being judged in the morning ; Category (b) in the afternoon.

Judges and Entries.—In each case there was a board of three judges, composed invariably of (1) the Director of a State Stallion Depot ; (2) a Remount Officer ; (3) a member of the Society. No judge was a member of more than one board.

The entries in Class (1) numbered 104 : 56 under 15·8, and 48, 15·8 and over ; in Class (2) were 56 entries, 31 being in the medium and 25 in the heavy-weight class, giving a total of 160 entries in all.

These entries seem small, but it must be remembered that this was only the second year of the show, so that everything is in the initial stage, and also that as the Government buys Cavalry remounts at three years old, the four-year-old class contained only horses which for various reasons—not necessarily those of inferiority—had not been purchased by the Remount Department.

The Horses that the French are Striving to Obtain.—As to the actual merits of the horses themselves, my experience hardly justifies me in expressing a decided opinion. What struck me very forcibly was the ‘showy’ type of most of the horses—there were not six really plain ones among the whole lot—the lightness and breediness of their build, and the ease and comfort they showed in all their paces. This, no doubt, may be explained by the fact that in France, hunting, as we know it, has never been a national pastime, and consequently no real need has been felt, as with us, for the big weight-carrying hunter. Such qualities as the French have hitherto aimed at, they have been able to obtain by the free use of the Arab and the English thorough-bred, for both of which they have always shown a strong predilection. A long rein and a smooth action may compensate for want of power and strength in horses required solely for hacking purposes, but what the French are now beginning to realise is their need for horses of the weight-carrying hunter type—not only for the sake of the Army, but also for the sake of the breeder. What they must produce is a horse

which, together with the qualities just mentioned, will combine those of size and compactness—a ‘stocky’ horse, as English dealers call it—which will not only carry the heavy cavalryman, but will also possess a commercial value in the public market. That they are endeavouring to do this there is no doubt. ‘On commence seulement,’ as a French Cavalry officer said to me when I expressed the above opinion. ‘In France, your weight-carrying hunter does not exist, but we are trying to produce him. Directly we get blood, we lose bone and “stockiness,” but these things will all improve in time.’

Judging.—The judging, which was carried out with the greatest care, occupied what appeared to me an inordinately long time. In the three-year-old class, the horses were first led out on a snaffle, stripped, and were then seen under the saddle. In the four-year-old class the order was reversed, the horses being ridden first, and then inspected, stripped; the reason was that in the second class more attention was paid to the degree of the horse’s training than in the first. The time occupied in judging 45 horses, viz. $3\frac{1}{2}$ hours—especially when it is remembered that many were sent back almost immediately—certainly cannot be considered too short. In addition to these rigid inspections they were ridden many times round the arena at a smart trot and at a good fast gallop, which in itself constituted a pretty severe test, certainly in the case of the more or less soft three year olds.

Prizes.—Of the prizes, which amounted in Class (1) to £480, and in Class (2) to £480, £100 was set aside in each class for the *breeders* of the winning horses, this ‘prime au naisseur’ being a particular and most practical feature of all French horse shows. The remainder of the prize money was held for the owners of the horses, and was paid only on the horses being sold to the Remount Department within the year.

Horses of the Cavalry School.—A further and an equally interesting competition was judged on the third day (July 18), the entries being made from among the horses at the Cavalry School aged seven and eight years. One could not but be favourably impressed by the general appearance of these animals, which

are especially bought for the 'élèves officiers' at the School, for which very high prices (from £80 even up to £200) are paid, and which are undoubtedly the pick of the French Cavalry horses. They trotted, cantered, and galloped round the arena, ridden by officers of the School belonging to the 'cadre noir,' or equitation branch, and finally jumped a very small bush fence—proving themselves to be trained school-horses of the first order.

'*La Pluie d'Or*.'—This competition was chiefly noteworthy, however, on account of the system of giving the prizes. As has been stated above, the horses competing were all seven or eight years old, and had then been purchased some four or five years previously. The breeder of a winning horse suddenly finds himself the recipient of an envelope containing a prize, of which his horse, foaled some seven or eight years ago, has just been adjudged the winner. This constitutes what is termed by the Society '*La Pluie d'Or*' (The Golden Shower)—its value as a stimulus to horse-breeding cannot be over-estimated. True, the prize money was small, amounting only to some £30 in all, but the system is, I believe, being copied in many shows in France, and it is the wish of the Society to make it general.

This plan of giving prizes to breeders of winning horses might be worthy of imitation in our own country, where we are continually hearing the complaint that the flourishing dealer or middleman gets all the profits, whereas the producer, be he land-owner, tenant-farmer or what not, cannot possibly make horse-breeding pay. It is certainly the dealer who wins all the prizes in our shows for hunters, hacks and high-class harness horses. How often, except in the case of young stock, does any one know the breeder's name?

Enough has been said to show how seriously the French regard the question of their national horse supply, and no praise for the patriotic and far-seeing Society, of which I have written, can be too high. In view of the present crisis in this country, it most certainly 'gives one to think.' From all sides comes the cry that horses of the hunter stamp cannot be found, except in small numbers, and at inordinately high prices.

English apathy in the matter has by no means escaped the attention of our Gallic neighbours, for while they have drawn freely upon the horse supply of these islands, acknowledging it to be the best in the world, they do not scruple to point out how, in their opinion, the time must come when the position of the two countries will be reversed. In a recent number of the 'Bulletin Officiel de la Société du Cheval de Guerre Français,' the writer of their editorial article says, not without a touch of humour as well as pride at the promise of success already attending their efforts:—'Normandy has in the past inundated Europe with its splendid carriage-horses. Why should we not in time do the same with our riding-horses? The glories of Saumur may yet make those of Dublin pale, and the world witness for the second time a "Norman Conquest"!'

In conclusion, I would express my thanks to those French gentlemen whose courtesy enabled me to attend the show and to see everything there was to be seen, and especially to the Comte de Comminges, through whose kindness I am enabled to publish the accompanying photographs. M. de Comminges is the author of a most valuable book,* which will prove of great interest to anyone wishing to inquire more deeply into the resources of France as a horse-breeding country.

* *Les Races de Chevaux en France—Comment et où on achète un Cheval de selle.* Par le Comte de Comminges. Paris: Librairie Plon-Nourrit et Cie., Editeurs, 8 rue Garancière. Price 3f. 50c.

NOTES ON ILLUSTRATIONS

BREMUS, by a thoroughbred sire out of a 'half-bred' mare. This horse is a *cheval de carrière* at Saumur, and the rider is the well-known Capitaine Féline, of the Cadre Noir.

TROOP HORSE of a Dragoon Regiment, dam a 'trotter' mare—the type officers complain of.

CYMBALIER, a well-known trotter.

ANGLO-ARAB, thoroughbred stallion.

ETIMALLE, by a thoroughbred sire, dam by a 'trotter' sire.

FLEURUS, a well-known trotter.

ESPOIR, by a thoroughbred sire out of a half-bred mare. Winner in the heavy-weight class at Saumur, 1908, and of the prize for the best-looking hunter at the show of the Société Hippique Française, 1909. He won £240 in premiums in one year.

FAVORI, by a thoroughbred sire out of a half-bred mare. Winner of the three-year-old class at Saumur, 1908.



BREMUS



TROOP HORSE.

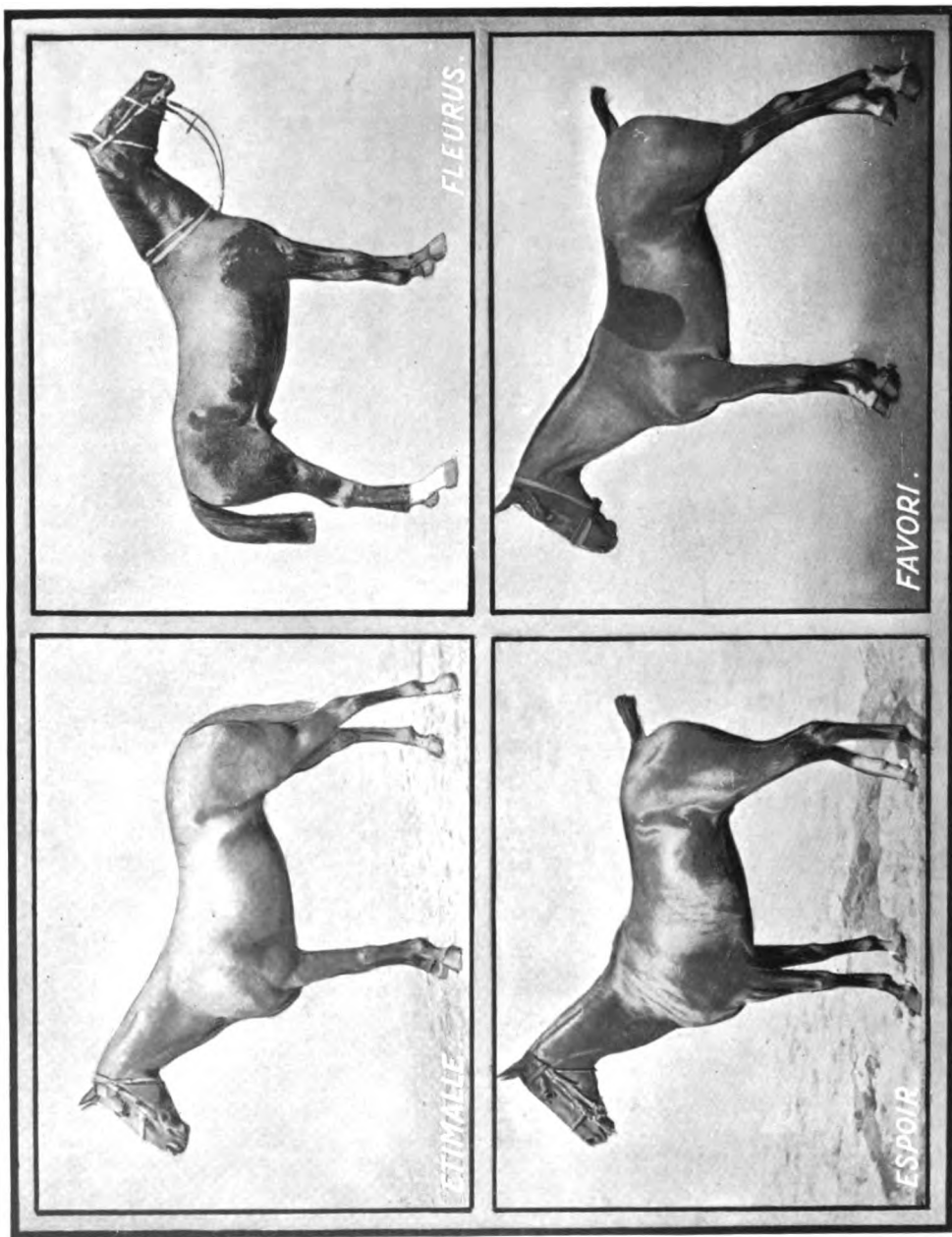


CYMBALIER.



ANGLO-ARAB

TYPES OF FRENCH SADDLE HORSES.



TYPES OF FRENCH SADDLE HORSES.

TRANSPORT SERVICE WITH THE CAVALRY DIVISION

By CAPTAIN H. F. PERCIVAL, D.S.O., *A.S.C.*

THAT an efficient transport service is indispensable to an army is now thoroughly realised, although for many years but little regard was paid to this important subject in spite of the bitter experience suffered in nearly every campaign of the last century owing to its neglect in time of peace.

We know from experience that it is not sufficient merely to ensure that the requisite number of drivers, animals and vehicles shall be available to carry out the work ; we must also organise and train this transport so as to enable it to carry out its duties efficiently, and, having organised and trained it, learn how to utilise it to the best advantage. The finest transport in the world can be rendered useless in a few days by mismanagement ; it has its limitations, and these limitations must be thoroughly understood by all concerned if it is to do efficient work. The Cavalry man is particularly interested in this question, since it is his arm more than any other which depends on mobility for its efficiency, and is therefore likely to experience to the full the limitations of its transport.

The object of this article is to review the transport question from a Cavalry man's point of view, and for this purpose it is proposed to deal with the service in connection with the Cavalry Division.

The transport of the Cavalry Division is divided into two main groups, namely :—

(A) The regimental transport with fighting units, which is again subdivided into first and second line transport ;

(B) The regimental transport of the administrative units: the Cavalry Divisional T. and S. Column and Cavalry Field Ambulances.

The first line transport is that portion of the regimental transport which carries ammunition, tools, technical R.E. stores, &c., in fact everything which a unit requires in action ; it therefore always accompanies the unit.

The second line transport conveys the baggage, stores, and supplies of units ; it is not usually required in action and can therefore be relegated to the rear when not immediately wanted.

The transport of the administrative units is not subdivided, but marches with the unit as a whole. The T. and S. Column, besides carrying one day's supplies and an emergency ration per man for the division, carries out the duties in connexion with the collection and distribution of supplies and transport and provides second line transport drivers for all units. It also provides artificers to assist units in maintaining vehicles and harness in a good state of repair, and to carry out the shoeing of animals of those units which have no farriers on their establishment.

The transport of the fighting and administrative units is sufficient to enable the Cavalry Division to take the field with 300 rounds S.A.A. per rifle ; 29,500 rounds per machine gun ; 396 rounds per gun ; two and a half days' supplies, two emergency rations, an extra grocery ration, and a waterproof sheet for each man, as well as certain regimental, engineer, and medical stores.

In addition to the above, three days' supplies are, under normal conditions, carried for the Cavalry Division in the six Transport and Supply Parks of the Infantry Divisions. The transport for these supplies is normally not under the immediate control of the commander of the Cavalry Division, but is to be placed at his disposal as occasion demands. Too much reliance, however, must obviously not be placed on the Cavalry Division being able to utilise extensively the services of the Infantry T.

and S. Parks for the replenishment of supplies. If the Cavalry Division is to be independent as regards its operations, as it clearly must be, it will frequently be impossible, or undesirable, for it to maintain, for supply purposes, connexion with the Infantry Divisions by means of convoys. The nearest sections of the Divisional T. and S. Parks will generally be at least a day's march in rear of the Infantry Divisions; and even if the Cavalry Division is at no considerable distance in front of the Infantry Divisions, it will always be a matter of some difficulty to push sections of parks to the front along roads probably fully occupied by the transport and troops of the Infantry Divisions. On the other hand—and this would especially be the case when the Cavalry Division is operating on the flank of the Army—mechanical transport carrying park supplies could frequently be employed with advantage for this Service. Similar difficulties exist as regards the replenishment of ammunition, equipment, clothing, &c. Ammunition is refilled from the Infantry Divisional Ammunition Columns, but for the present, no transport is allotted for the replenishment of equipment, clothing, &c.

In view of the uncertainty of the supply from the Infantry Divisional Parks, it is obvious that, if the Cavalry Division is to carry out its proper functions, it must either live to a great extent on the country, or it must provide itself with a separate Transport and Supply Park and seek connexion with the L. of C., not necessarily through the Infantry Parks, but at the point which is considered, under the circumstances, the most suitable.

Since no commander is willing to burden himself with large transport columns, which impede mobility, so long as he has the means to manage without them, it is generally advocated that the Cavalry Division should live on the country. It must not, however, be assumed that the mere fact of living on the country will relieve a Cavalry force from the necessity of providing itself with additional transport. General v. Bernhardt, in a lecture on Cavalry organisation, states that in spite of the fact that the

German Cavalry Divisions were operating in 1870-71 in a rich country like France, they still found it necessary to provide themselves with transport to carry a six days' supply of oats. Though patrols, detached squadrons and small bodies of troops will, under average conditions, be able to obtain from the country sufficient supplies daily to render themselves independent of their transport, this will not be the case with large bodies, except when the line of advance leads through, or is connected by rail with, large towns and villages where supplies of every description are abundant. Where these favourable circumstances exist, it will be possible to collect sufficient food and forage at certain points in advance and allow the troops or their transport, as they pass by, to pick them up, thus obviating the necessity of employing this additional transport. It may even be possible to obtain food and forage for the Cavalry Division in billets, but this method of feeding troops cannot be relied on with any degree of certainty. When we consider that even Continental armies, who are experienced in this method of living on the country, find considerable difficulty in carrying it out where large bodies of troops are concerned, and that our troops are untrained in this respect, it will be clear that we cannot depend on making extensive use of this system.

If it is not possible to obtain supplies either by rail or in large towns or billets, the Transport and Supply Column will find it difficult to keep up with the Cavalry Division, if it is also employed in collecting supplies at points not in the immediate vicinity of the roads used for the advance. Since this transport does not even after an ordinary march usually reach the troops until evening, often not till late at night, it is obvious that, if it has to proceed any distance to refill, it will be unable to keep up with the troops next day. Therefore the moment it becomes necessary to utilise the supplies of outlying towns and villages, either the daily marches of the Cavalry Division must be restricted so as to enable the existing transport to carry out the collection of supplies and also to keep up with the troops, or additional

transport must be raised for the purpose of collecting these supplies and transporting them to points where they can be issued either to the troops or to the second line or administrative transport. Since the mobility of the Cavalry Division must not under any circumstances be restricted, the latter course will have to be adopted, and additional transport will have to be raised locally. As regards the personnel required for the collection of this additional transport, the establishment of the Cavalry Divisional T. & S. Column does not provide sufficient to carry out, under these circumstances, all the work, and accordingly men to assist in this service will have to be detailed from different regiments.

Perhaps a few words should here be said in connexion with the requisitioning of road transport. The Cavalry man will have no difficulty in selecting the most suitable horses and harness required, but he may not be equally familiar with the vehicles of the particular country in which he finds himself. It is well to remember in such circumstances that the type of vehicle in general use for transport purposes in a particular district may be assumed to be the most suitable type of vehicle for ordinary military transport purposes in that district; light spring vehicles are generally best suited for the transport of light loads, at a rapid pace, but they have not the same stability as vehicles without springs. Besides this, broken springs are not easily repaired on the line of march, and therefore for heavy loads it might be advisable to give the preference to heavier vehicles without springs. It is not possible here to enter into details as regards the examination of vehicles as to condition, but it may be stated that the most important parts of a vehicle are wheels and axles. If these are sound and in order, the chances are that the vehicle itself is either fit for the road at once, or can be soon made fit.

As regards the procedure when requisitioning transport, strict adherence has, as a rule, to be given to the general instructions issued on the subject by Army Headquarters. From time to time it may, however, be necessary to issue special instructions.

Thus, when an independent Cavalry force is carrying out a special mission in a hostile country the regulation which directs that requisitioning officers, on giving receipts, are to state the unit and force for which the transport is required may have to be modified, as it is likely that the information contained on the receipts may pass into possession of the enemy. On such occasions, it would perhaps be best to direct requisitioning officers to insert one or more cypher code words in the receipt note in place of the description of the unit and force, but care must always be taken that sufficient information is given to enable authorities who have to settle such accounts to ascertain without delay the service for which the transport was requisitioned.

If it is impossible or undesirable to live on the country, the organisation of a separate Park for the Cavalry Division will generally have to be taken in hand at once. In countries where conditions permit the use of mechanical transport, this description of traction appears best suited to the purpose owing to its ability to cover greater distances daily than other road transport. It should have an organisation similar to that of the M.T. sections of the Infantry Parks, and should be well fitted out with moveable workshops, since in consequence of its employment at a distance from the main line of communications, it could not depend on obtaining assistance from dépôts.

Rules for the conduct of transport on the march are laid down in the Field Service Regulations. It should be remembered that horse transport may have to move at the trot from time to time to keep up with modern Cavalry, and loads have to permit of a faster pace than the walk. The dismounted details who usually accompany this transport must necessarily ride on the wagons when the faster pace is ordered, but at other times no one except drivers and artificers, who have to work on arrival in camp, are to be permitted to ride on the wagons. When it can be foreseen that transport will have to move at a rapid pace, it is advisable to hire or requisition light spring vehicles to carry dismounted details, but this must of course not be done

without the authority of the officer commanding, as the increase in the length of the transport columns may have to be taken into account.

As regards the march of the mechanical transport convoys doing duty with the Cavalry Division, due allowance must be made for getting up steam (one to two hours), taking in fuel and water, over-hauling engines, &c. It is often considered that engines are capable of working continuously day and night. Allowing that engines can occasionally be worked for considerable continuous periods, the crews must have rest. Eight hours on the footplate is a good day's work for a man, and he cannot be expected to do more than this when marching daily. Even when it is possible to arrange for relieving crews, the engines must have daily a period of rest during which the wear and tear of mechanism can be adjusted. Therefore, though a few engines can occasionally accomplish 45 miles, or even more than that in a day, columns of mechanical transport should not be expected to cover more than 30 miles a day.

The transport marching immediately in rear of the Cavalry Division is not so likely to be molested by hostile troops or inhabitants as the convoys moving between the lines of communication and the Cavalry Division. The rules as regards information and protection laid down in the Field Service Regulations should always be carefully observed. Although it is directed that nothing should be done to provoke an attack, commanders of convoys should nevertheless take immediate and energetic action whenever there is the slightest sign of interference with a convoy on the part of hostile inhabitants. On such occasions commanders should not be satisfied with merely ensuring the safe passage of their own convoys, but should completely suppress the hostile movement and inflict immediate punishment on the offending inhabitants. If this is not done, the inhabitants will gather courage and convoys subsequently coming through the same district may find the whole population in arms against them; a large force may then have to

be detailed at much inconvenience to deal with a rising which could have been checked in the first instance by the energetic action of a small escort. Another point in connexion with the movement of independent convoys through hostile countries is deserving of notice, namely, that they should dispense with the sending of billeting parties in advance in order to arrange for the accommodation at nights in villages, towns, &c. If this is disregarded, timely notice may be given to hostile inhabitants to arrange for action against the convoys.

Though it is not within the province of the writer to discuss the likelihood of one of the latest engines of war, namely, the armoured car, being used against the communications of the Cavalry Division, it is perhaps well, before concluding these notes, to refer to the subject. Whenever the presence of such hostile cars is suspected, arrangements should be made to attach one or more wagons or carts to the advanced and rear guards of convoys. On the approach of a hostile armoured car being signalled, these vehicles should be drawn across the road, horses unhooked and led to a place of safety, the guard at the same time taking cover within range of the vehicles. If no cover is available, the vehicles will have to be upset, or so locked together that it is difficult to clear them out of the way. The subsequent action by the convoy depends on circumstances, but the chance of capturing the car by blocking the road at a point which it has already passed, should of course be kept in view.

There are many other points in connection with the administration and conduct of the transport service which are of special interest to the Cavalry man, but space forbids.

In conclusion, let me say that while emphasising the importance of thoroughly organising the transport service we must not overlook the carrying capacity of man and horse, because—as so aptly put in a Staff Officer's Scrap Book—

‘The finest transport in the world will not compensate for want of carrying power on the part of the men, who cannot always fight with their luggage carts at their backs.’

ROYAL NAVAL AND MILITARY TOURNAMENT

By MAJOR J. C. BRINTON, M.V.O., D.S.O., *2nd Life Guards*

IF we may judge from the attendance at the Royal Naval and Military Tournament this year, we may fairly assume that the Executive Committee have secured another signal success in their endeavour to stir up popular enthusiasm into a just appreciation for excellence in feats of arms, and it seems certain that the British public has arrived at a due sense of its responsibility towards the Tournament in this respect. As that part of the programme is of more particular interest to readers of this JOURNAL, we propose to confine our criticisms and comments to the mounted events, and to touch briefly, first upon the mounted combats and competitions, and finally to refer to the latest additions to the Tournament's programme, namely, the Officers' Jumping Competition under International Horse Show rules, which has excited widespread interest.

There has been an undoubted improvement this year in Sword *v.* Sword and Sword *v.* Lance. This may be due to the fact that competitors have now had time to accustom themselves to the use of the new Cavalry sabre, which has now finally taken the place of the old single stick. The fighting of Lieutenant H. Boyd-Rochfort, 21st Lancers, who for the second time in the last few years has secured the coveted honour of being the best mounted 'man at arms,' is deserving of all praise. In this connexion it may not be out of place to refer to the difficulties with which the judges of the mounted combats are, and have always been, confronted. While the judges must necessarily be on foot, it is almost impossible for them to follow with the eye

every rapidly executed phase of a mounted combat, and many suggestions have already been made to obviate their difficulties, but no practical solutions have yet been forthcoming. The rule which it has been found necessary to enforce that officers should, on the penalty of having marks scored against them, acknowledge when hit, has apparently 'come to stay.' It is, however, far from being a satisfactory solution to this problem, and is open to many objections. It is contrary to the spirit fostered in the Cavalry for a man to acknowledge defeat, moreover it is not always easy for a competitor, in the heat of the *melée*, protected as he is by much covering, to know exactly when and where he is touched. Often, too, the fear of not acknowledging is a handicap to his fighting; and finally it is, in a measure, a confession of incompetency on the judges' part, for, if they felt confident that they never missed seeing a point or cut, acknowledgment would not be necessary. The judges should, of course, be placed in a position where they could look down upon the competitors, and where the points or cuts of one competitor could not be masked by the other. Until this difficulty has been overcome, it will be almost impossible to deliver a judgment to everyone's complete satisfaction.

As regards the heads and posts, and the lemon cutting and tent pegging, the performances of the competitors, excellent as they were, show no marked improvement on former years, but at the same time have fully maintained their high standard of efficiency. The lemon cutting of Major King, Royal Horse Guards, was so good that it is almost impossible to conceive any improvement upon it. He has established a high standard which all young Cavalry officers should strive to emulate.

No competition in the programme has created greater interest throughout the Service, nor has any been more freely discussed, than the Officers' Jumping Competition.

Last year twenty-two British officers competed at Olympia in the International Horse Show. Though they acquitted themselves most creditably against the foreign officers, it was obvious that, if British officers were in future to hold their own

in competitions of this nature, something must be done to encourage that particular style of jumping which is required in the arena ; hence this competition now forms part of the Tournament programme. Considering that this movement has only been on foot during the last few months, the greatest credit is due to the twenty-nine officers who, having undergone the preliminary process of elimination during the sixteen days of the Tournament, were left in to compete in the final on Saturday, May 29.

Some of the methods which are in vogue among those who train horses for show jumping abroad will never be popular in this country. Nor is there the same inducement for British officers to give large prices for show-ring jumpers, as the value of the prizes in this country is quite inconsiderable. In spite of this, and other drawbacks, the improvement which was shown on the final day of the Tournament over last year is very noticeable.

Arena jumping is a very different thing from cross-country riding, but nobody who has witnessed the admirable display given by the Royal Horse Artillery Riding Establishment need ever despair of our being able to hold our own against our foreign rivals. Out of the 125 entries among the officers in this year's competition, Lieutenant G. Brooke, who had already recently met with success in Buenos Ayres, was the winner. In the forty-four jumps which he negotiated, he was only debited with seven and a half faults, whilst two-thirds of the riders had an average of under thirty-five faults. Lieutenant Brooke, 16th Lancers, Lieutenant Malise Graham, of the same regiment, and Lieutenant Worthington, 3rd Dragoon Guards, who represented the Army in the King's Cup at Olympia, fully justified their selection ; individually Lieutenant Malise Graham's performance was the best of all in that competition, and he received a souvenir similar to that given to members of the winning team.

As the War Office Committee are empowered to offer any inducements to encourage British officers to attain a high standard of proficiency in show jumping, we might respectfully

make these suggestions. That the officers who have gone through the trouble, and borne the expense of training a troop horse for competition at Olympia, should have the option of either retaining one such horse as an extra charger, or should be allowed to purchase it from Government afterwards, the Government, of course, retaining the right of first refusal to repurchase the animal hereafter. Under the present rules an officer may spend much of his time and much trouble and no little expense in training a horse to compete against foreign rivals, only to be obliged to return that horse to its squadron stable on the completion of the horse show.

Obstacles of the type which competitors have to negotiate at the Royal Naval and Military Tournament should be provided free of charge at all the larger military stations in the United Kingdom, to afford officers an opportunity of giving the horses sufficient practice, without being called upon to defray the expense of their construction out of their own pockets.*

One or two alterations have been proposed by the judges for next year's Tournament programme. In heads and posts the present rings and balls which are in vogue leave much to be desired. A competitor who merely knocks the ball off the post should not, of course, be awarded as many marks as a man who delivers a very strong point. In order to encourage more spirit and dash and strength in the points, it has been suggested to substitute the Dietz dummies for the rings, if not for all of the points in heads and posts. The decision to refuse entries from riding-masters in this year's Officers' Jumping Competition has also been reconsidered, and it has been suggested now to open the jumping competition to riding-masters in future. As the jumping competition under the Grand International Horse Show rules has really eclipsed the long-established Officers' Riding Competition, it has been decided to abolish the latter and to substitute the former for it. The Executive Committee may congratulate themselves that the entries for this year's competition among the officers have exceeded all former records.

* £25 was this year allotted to each Command for this purpose.—EDITOR.

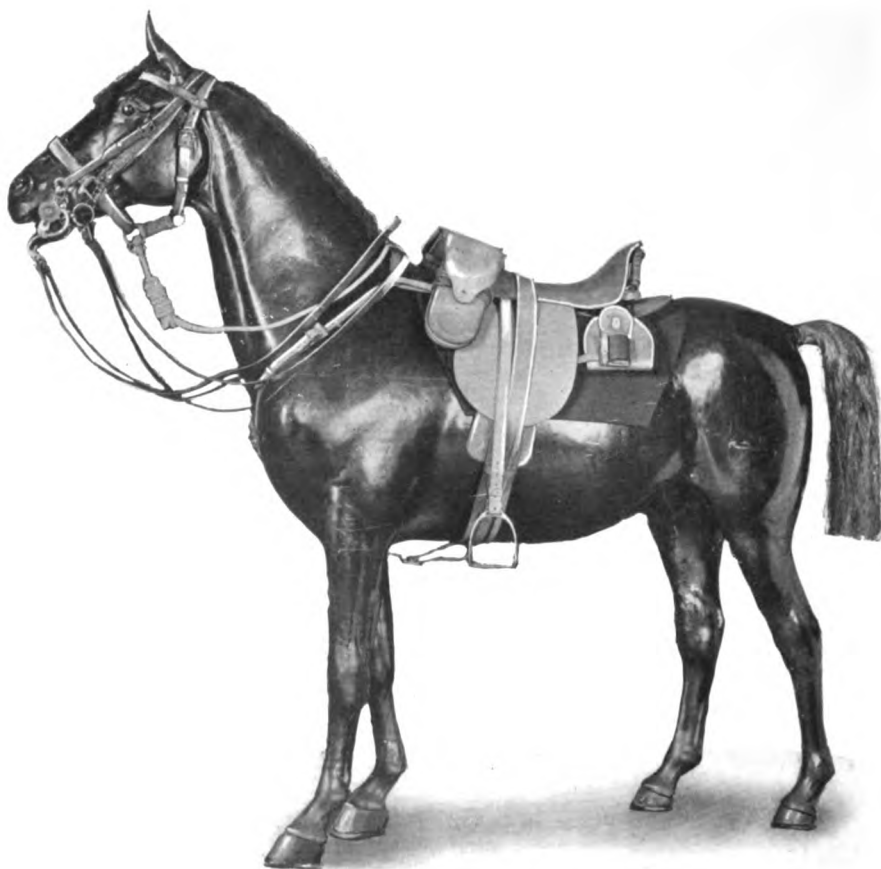
THE ROYAL NAVAL AND MILITARY TOURNAMENT.



LIEUT. H. BOYD-ROCHFORD (21st Lancers).



LIEUT. G. F. H. BROOKE (16th Lancers), WITH "ALICE."



THE EVOLUTION OF THE CAVALRY SADDLE.

1899.

A set of Universal Saddlery with which each Regiment of Cavalry was equipped prior to embarkation for South Africa.

THE EVOLUTION OF THE CAVALRY SADDLE

By MAJOR J. HORTON

HISTORY tells us that at one time Commanding Officers of Cavalry regiments received a money allowance from the State wherewith to supply Saddlery ; though there was doubtless some variety of pattern in the equipment thus provided, the system probably worked well enough in peace, but its unsuitability for war caused its general abandonment after the Crimean Campaign, except in the case of the Household Cavalry which continued to purchase its saddlery till 1880.

In 1856 the life of a saddle was fixed at fourteen years ; at the present time a well-cared-for saddle will last for ten years.

That considerable attention has been paid to this most important part of a Cavalry soldier's equipment, is shown by the many changes of the standard patterns which have been introduced. In contemplating such changes, it is always well to remember that when a new pattern saddle is approved, the existing ones in use (as well as the reserve stocks) have to be retained till worn out, and that the general issue of the improved pattern must therefore be postponed for eight or ten years. For example, the 1890 saddle, the outcome of trials commenced in 1887, was not in general use till 1898, and the old pattern drivers' transport saddle purchased in 1858 could be seen in use until a few years ago.

Quot homines, tot sententiæ.

Perfect agreement, even among experts, is seldom attained, and on the question of military saddles opinions are many and conflicting,

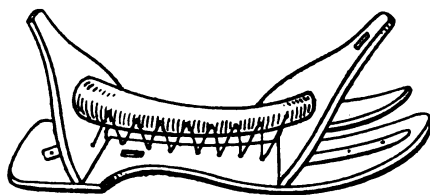
The essentials of a Cavalry saddle are that it must be capable of carrying heavy equipments in addition to the rider's weight, that it must be simple of construction, easily repairable, and capable of adjustment, and that it must retain its serviceability under the roughest conditions of active service, knocking about, and exposure to bad weather, as well as the constant twists and strains inseparable from riding in the ranks in marching order.

Under such conditions a high class hunting saddle will not last twelve months, and there is no more conclusive testimony to the value of our military pattern than the invariable demands made for it by all classes of mounted troops in the later periods of the South African War.

The following descriptions will show the gradual evolution of our present Cavalry saddle, which as nearly as possible fulfils the essential conditions of the Service :—

(1) SADDLE, WOOD ARCH, PILCH SEAT

These saddles were in general use in the Cavalry prior to and during the Crimean War, and the 11th Hussars retained them until 1866.



TREE

The arches were of wood, high and sloping outwards, the side bars were narrow and of medium length.

The seat was a loose pilch one, padded and quilted. It

was supported by a narrow underseat of raw hide attached to the arches and laced on each side to the bars by raw hide laces.

The seat was short, not more than $16\frac{1}{2}$ inches, and with a very low dip in the centre.

The flaps are narrow and of medium length.

EVOLUTION OF THE CAVALRY SADDLE 861

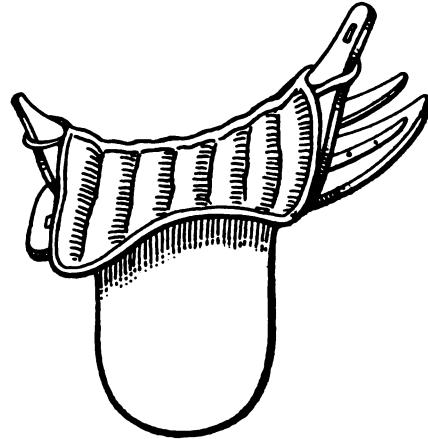
A blanket was worn with this saddle up to 1855.

The pannels which then replaced the blanket, were thickly stuffed with horsehair and lined with white serge.

The girth was of stout hemp web, permanently fixed to the off-side bar by raw hide laces, and having two leather tabs (girth straps on a broad leather piece) permanently laced to the near-side bar. A breastplate and crupper were employed.

The stirrup leathers had single buckles which were worn near the stirrup, the spare end in a roll.

The stirrups were heavy and narrow in the tread.

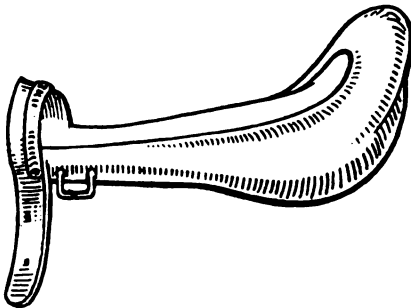


SADDLE

(2) HEAVY CAVALRY SADDLE

This pattern was used by some Heavy Cavalry Regiments before the Crimean War.

It was similar to that known as O.P. Transport Saddle and Royal Artillery O.P.

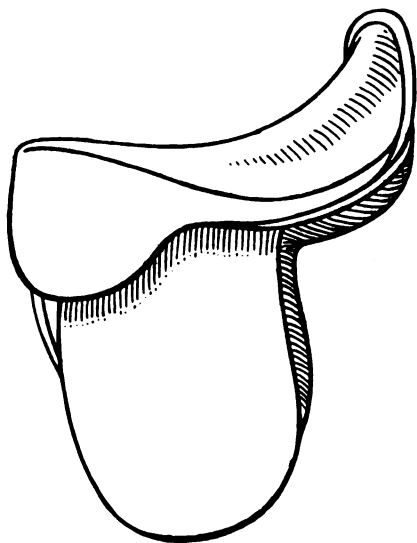


TREE

The tree conformed to the hunting saddle tree, but was much heavier, having arches of wood, with gullet plates, bar plates, and cantle plates, and being without any extension of the side bars in front or rear of the arches. Iron stirrup staples were fitted to the tree.

The seat was of hide (cow hide split) formed on stretched web and serge, and padded with flock, as in the hunting saddle. The length of seat varied, some being very short.

The Household Cavalry saddle up till 1894 was of this class, but with extended side bars (*fans*) in rear of cantle.



SADDLE

The flaps were broad and short.

The pannels were formed like those on the hunting saddle, but heavily stuffed with flock.

A blanket was worn in the Crimea under these pannels.

The girth was the same as the one described for the pilch seat saddle (see above) and similarly attached, and the stirrup leathers and stirrups were also similar.

Breastplates and cruppers were worn.

(3) UNIVERSAL WOOD ARCH SADDLE (Nolan Pattern)

This pattern was introduced in 1854, and made in three sizes. It was in use in British Cavalry regiments in India as late as the year 1885.

The arches were of wood, the front arch being upright, while the hind arch sloped to the rear, and had a high cantle.

The front arch was strengthened with an iron gullet plate and three crown plates, the hind arch with an iron plate and two fan plates. The fan plates were omitted in later manufacture.

The side bars were 24 inches in length, having slots in them for stirrup leathers, and smaller holes for securing the girth and girth tabs by lacing.

The seat was of solid leather, blocked and riveted to the arches, and about $16\frac{3}{4}$ inches in length.

The length of seat afforded to the rider was considerably reduced by the shabraque and sheepskin, each having a thick

EVOLUTION OF THE CAVALRY SADDLE 863

leather seat worn over the saddle, these when strapped down between the arches by the surcingle gave but 16 inches of length.

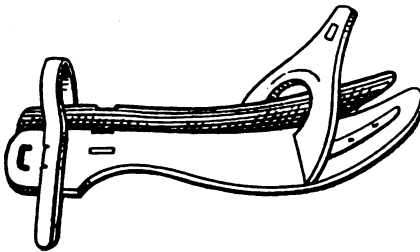
The flaps were short, and medium width, and set straight.

The pannels were heavily stuffed with horsehair and lined with white serge, the facings (rounded parts on the edges) were very thick, and the weight of a pair of pannels averaged from 5 lb. to 6 lb.

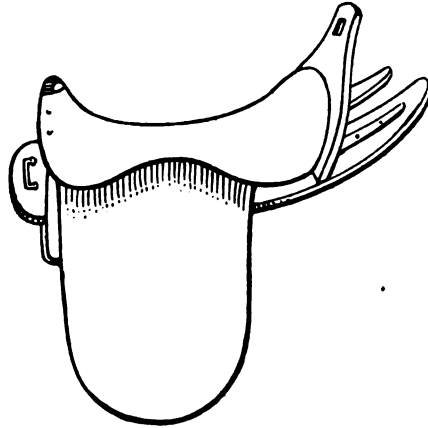
Numnahs were introduced when the blanket was taken away, and were worn with the pannels.

The girth was of stout web as described in the pilch-seated saddle and similarly attached.

The latest manufactured trees were fitted with iron staples for carrying two girth straps on each side, and a solid leather girth having buckles at each end was brought into use.



TREE



SADDLE

The stirrup leathers and stirrup were as described with the pilch-seated saddle.

Cruppers and breastplates were worn, the latter attached to a ring on the crown of the arch.

The carbine bucket was a small 10-inch leather tube, with an iron bound mouth. It was suspended from the front arch off side, so as to hang a little below and in front of the wallet. A strap attached to a ring on the crown of the arch was used to buckle round the small of the butt of the carbine to hold it securely.

In 1868 the long carbine bucket, worn as now, was issued generally ; it had a broad leather flap to attach to the surcingle, and a leather rounded strap to fasten the carbine in the bucket.

In 1869 the shabraques were withdrawn.

The defects found in this saddle were as follows :—

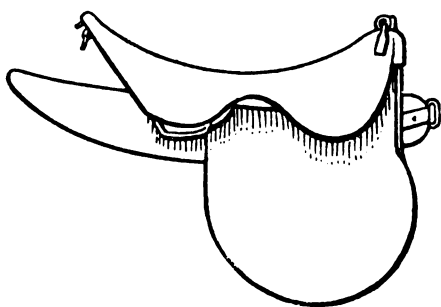
The attachment of girth was too far back. The pannels were too thick. The hind arch was too high.

The joints of the arches opened owing to the constant washing of the wood (to get it white) and by the strain of the load. The gullet plate required frequent renewal.

The front arch stood a strain of 4 cwt., but being elastic it yielded slightly under this weight.

(4) UNIVERSAL FLAT IRON ARCH SADDLE

This pattern was introduced in 1870, and made in three sizes. The tree stood but $2\frac{1}{2}$ cwt. on the arch.



FLAT IRON ARCH. Tree same as (5) but flat iron arches

The arches were of flat iron, the cantle was low, being without a spoon ; the side bars were similar to the previous pattern, but rather thinner.

Stirrups slots and girth bars were as with the wood arch tree.

The seat was of solid leather, attached to the arches

by straps and buckles. The flaps were short.

The pannels had heavy welts, and facings like a thick cord round the edges and under the flaps, and were thickly stuffed with horsehair. The flaps of the pannels were shorter than on previous saddles.

The girths were of solid leather, as mentioned in the previous pattern.

Breastplate and crupper were worn. Stirrup leathers as before, but the stirrups were less bow-shaped.

EVOLUTION OF THE CAVALRY SADDLE 365

This saddle was weak and unserviceable, the arches opened and let the seat down, the bars were too thin to carry the iron arches and often split.

The girth straps were set too far back on the saddle, they depressed the hind part, the weight of the rider not being properly distributed over the bearing parts of the pannels caused the saddle to ride forward, and girth-galls resulted.

The low cantle and the absence of a spoon made it practically impossible to keep the centre of the rear pack up off the horse's back.

(5) UNIVERSAL ANGLE IRON ARCH SADDLE

This saddle was introduced about 1876, and made in three sizes, later in four. This saddle differed from the flat iron pattern in having stronger arches of angle iron.

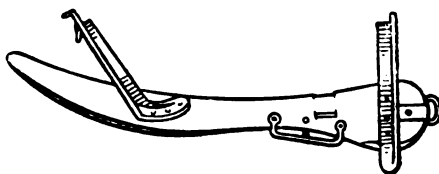
The authorities had recommended that the arches should be low, and they were so made, but they proved faulty. Those of later manufacture were ordered to be made with the hind arch higher than formerly, but it still gave a low cantle.

The girth straps were placed much more forward, directly under the stirrup slots. This corrected the tendency of the girth in its old position to cause the saddle to ride forward.

The girth, breastplate, &c., were as in the previous pattern.

After the introduction of pattern 1890 saddle (see p. 366) an 8 oz. steel plate was fitted to the front arch, which strengthened the bearing power of the saddle. Originally it stood a steady strain on the front arch of 3 cwt, but after the plate was added, 4 cwt.

The low cantle did not allow the centre portion of rear pack or valise to be strapped up sufficiently off the animal's back. It allowed idle and short stirrup riders to sit with the greater weight on the hind arch, depressing the rear part.



ANGLE IRON ARCH TREE. Saddle as (4)

(6) UNIVERSAL PATTERN 1890 SADDLE.

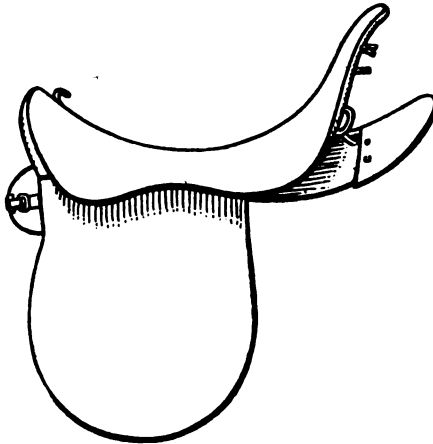
Made in four sizes, and to stand a pressure of 6 cwt. on the front arch. They are now in general use.

The arches were of wrought steel, the front being of channelled form, the hind bevelled with a spoon to give a high cantle. The high cantle was intended to give a more secure seat, to allow the rider to mount readily, and to admit the rear pack being strapped well up in the centre.

Stirrup links were fitted to the side bars in lieu of slots. This was necessary, as with the slot arrangement stirrup buckles

were often pulled over the top edges of the wood bars causing sore backs, particularly when thin pannels were employed.

About two years subsequent to the introduction of the saddle, the V. Attachment was authorised to replace the links for attaching the girth straps. The first pattern was fitted with dees, the latter, which is still in use, with brass plates.



SADDLE

Numnah pannels are approved with this saddle, and a Numnah of new shape was introduced similar to present pattern.

Hair pannels were replaced by a blanket $4\frac{1}{2}$ lb. in weight, when first introduced, and afterwards increased to 5 lb.

Breastplates similar to the hunting pattern (i.e. attached to the front of the side bars and not to a ring on the front arch) came into use and cruppers were discontinued.

The old pattern breastplate attached to the crown of the arch, worked continuously on the pommel ring with every movement of the horse's shoulder, and as the saddles were often cocked up

EVOLUTION OF THE CAVALRY SADDLE 367

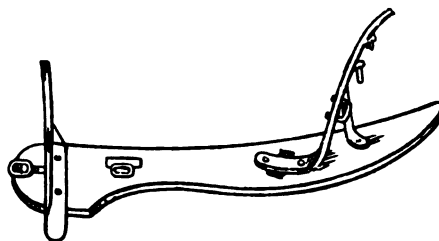
with the thick pannels an objectional see-saw drag on the saddle was caused.

The *Seat* was formed of two layers of thin leather, having a thin piece of felt between, and supported by a web underseat. A solid seat was brought in as Mark II. in 1892. A slightly wider arch with an increase of $\frac{1}{4}$ inch in height as Mark III. in 1898.

The *Girth* was a wider leather one than formerly and split 6 inches on each side of the centre to give elasticity behind the elbows, leaving a 6 inch solid centre.

The *Sheepskin* was divided into front and hind, and the hind part could be shaped into a Valise. They eventually became obsolete.

The *Carbine Bucket* in 1890 was a small one like an elongated pistol holster. A narrow arm stiffened with whalebone had replaced the broad leather one. The suspending straps were placed on the sides to allow the bucket to be worn on either side of the horse.



TREE

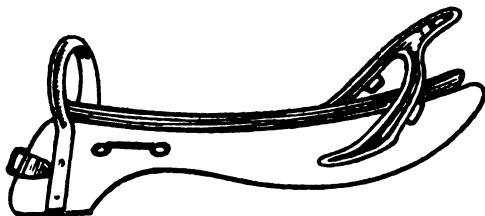
Many of the changes of pattern brought in at this time were recommended after trials extending over some years by the Saddlery Committee of 1884, of which General Sir Frederick FitzWygram, I.G.C., was President, General Sir Charles Fraser, and other experienced Cavalry officers were members.

(7) UNIVERSAL STEEL ARCH 1902 SADDLE

This is made in three sizes, large, medium, and small.

It is a lighter saddle than the previous pattern. The arches are of wrought steel, the front of bevelled steel, but with points cut off flush with side bars, the hind arch of angle steel with spoon cantle riveted on and lower than before.

The side bars are thinner and shorter than those in the 1890 saddle; they are intended to be worn covered with felt pannels. The front ends of the bars (Burrs) are shorter than those in previous saddles.



TREE

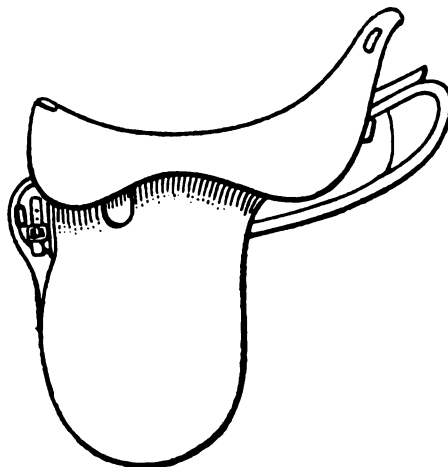
Flaps.—These are set more forward than was the rule for the preceding saddles.

Breastplates.—A percentage only used.

Wallets and Numnahs.—Obsolete.

Numnah Pannels.—To be worn on each saddle with a saddle blanket.

The points of the front arch on previous saddles were designed to give the front a fork grip, but they were an evil, preventing saddles otherwise suitable being used on larger horses than the grip of the points indicated; their removal allows the saddle a wider range of fitting and the front arch a less chance of opening by their leverage.



SADDLE

(8) HOUSEHOLD CAVALRY SADDLE

The saddle issued to regiments of Household Cavalry (after the system of providing them regimentally ceased in 1880) was determined by the three Commanding Officers.

The tree was of the same type as that used in the hunting saddle and O.P. Transport mentioned above.

The tree was of beechwood strengthened with iron plates, the bars being covered with glued linen cloth, and in part with

EVOLUTION OF THE CAVALRY SADDLE 869

hogskin; the side bars extended behind the cantle; the latter was brass bound; the seat was of solid leather riveted to the arches and $18\frac{1}{2}$ inches in length; the girth straps were sewn to webbing attached to the tree.

The pannels were similar to the line Cavalry pattern, but stuffed with white flock and fitted with sweat flaps.

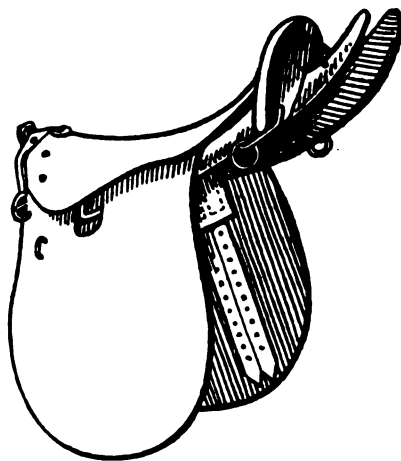
The seat which was 1 inch longer than the old regimental patterns caused much dissatisfaction; shorter seated saddles as in use before 1880 were considered advisable to prevent chafed backs and galls, and in 1895 this saddle became obsolete, and the line Cavalry saddle (1890 pattern) was substituted.

Individual opinions of experienced officers have varied widely on many points of detail such as blankets, wallets, &c. When first approved in 1890 some authorities considered a 4lb. blanket suitable, while others preferred one of 7 lb. weight.

Eventually a 5 lb. blanket became the standard.

In 1901 the same wide difference of opinion prevailed, some advocated a very light blanket, others a very heavy one. On active service two blankets will now be carried, one for the horse and one for the man.

Wallets are now obsolete, though many authorities advocate their reintroduction, to free the rider of some of his present awkward load. Prior to 1884 they were so made that when filled, they bulged forward and backward taking up seat room. The later pattern was formed with double gussets which extended outwards to take up less space on the saddle and to give a bed for the rider's thigh or knee. Single loops at the back were placed so as to give an oblique set to the wallets to suit the angle of the rider's thighs. When partly filled with straw they



formed good knee pads, and were frequently used in the early stages of breaking restive horses.

Unfilled they gave the young rider a sense of security in the saddle, and acted as a crutch to timid horsemen.

Pannels stuffed with hair or flock have not proved so serviceable as felt (Numnah) pannels.

Felt pannels give advantages lacking in saddles used with bare side bars. They admit of layers of felt being added to build up the bearings; they get a certain grip of the blanket and provide knee rolls; they also give protection to the wood bars when off the horse.

Finality is hard to reach, especially in patterns of military equipment.

Doubtless Committees on Saddlery will sit again and improvements in materials will result in further decrease of weight, but it is hoped that the details above set forth will be of value to would-be reformers, and save them from going over ground which has been traversed before by generals and other officers of no less experience than themselves.

THE GERMAN CAVALRY TRAINING OF 1909

By COLONEL H. WYLLY, C.B.

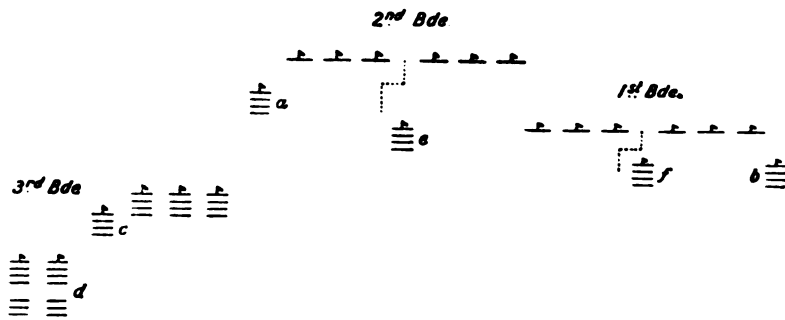
It is claimed for the new Manual that it marks a very distinct advance in the preparation for war of man and horse, the 1895 book which it replaces having been no more than a sort of stepping-stone as it were between the days of mere drill and those of battle-training. Everything that is merely formal has been cut out, so that for the future no man may complain that it is necessary to forget in the field that which has been taught him in quarters, but at the same time everything of real value has been retained. The introduction closes, appropriately enough in a manual which breathes throughout the whole spirit of the offensive, with a paragraph taken bodily from the old Prussian Cavalry regulations of 1727, and which states that 'no squadron should under any circumstances ever await attack, but must always attack first.'

'The German Cavalry Training' is divided into four parts—Part I. Training Mounted, Part II. Training on Foot, Part III. The Combat. and Part IV. Ceremonial.

Part I. is sub-divided into seven sections—'General Principles,' 'the Squadron,' 'the Regiment,' 'the Brigade,' 'the Division,' 'the Cavalry Corps,' and 'the conduct of Manœuvres,' the two last being new.

GENERAL PRINCIPLES

In Section XIII, explanatory of certain definitions, the distinction between *Treffen* (supporting lines) and *Staffeln* (echelons, offensive and defensive flanks) is very carefully drawn. '*Treffen*' is now taken to mean fractions of a unit disposed in rear of one another but which *may* overlap. *Staffeln* are fractions of a unit disposed in echelon. We are permitted to take it that the old so-called *Dreitreffen-Taktik* (formations in three supporting lines) was a misnomer as hitherto employed, and the following rough sketch will explain the difference of meaning and employment between the *Dreitreffen-Taktik* of the 1859 Manual and the more correctly termed *flügelweise Verwendung* (wing formations) described in that for 1909 :



The brigades are here disposed *flügelweise*: they are in echelon to one another or *gestaffelt*; certain squadrons or regiments—as *a*, *b*, *c*, and *d*—are in echelon; some in *Treffen* within the brigades, as *e* and *f*.

Among the first few pages there is what is in the main a new paragraph on the position of the commander; subordinate commanders should under ordinary circumstances remain in the places laid down for them, but independent commanders should post themselves where they can best direct, special stress being laid upon the need for all to keep their eyes on their particular leader. Importance is attached to the sounding of the 'Regimental Call,' which, used in cases of urgency when there is no time for orders, signals, or words of command, directs the eyes of all on the commander, a sign from whom, or even the mere fact of noting the direction in which he is moving, is considered sufficient to cause all squadron commanders at once, independently, and by the shortest way place their squadrons so that the C.O. will be in front of the centre. A warning is uttered against the misuse of signals and we are reminded that they take longer to filter through and to be acted upon than words of command.

There has been a slight diminution in the pace—in deference apparently to a very generally expressed wish—the rates now laid down having been brought into line with those given in Field Training: at the trot 275 *Schritt* are passed over in one minute, (the *Schritt* being taken at 80 centimetres or about 31.5 inches), or something like five yards per minute more than in the 'general pace of manœuvre' laid down for British Cavalry.

THE SQUADRON

Special attention is to be given to instruction in rising in the stirrups at the trot—which is for the future to be the rule—and to rapid mounting and dismounting, in view of taking advantage of fleeting opportunities for fire-action. Jumping is to be practised in single rank with loose intervals. In the paragraphs on the 'Squadron in the attack,' the importance of all ranks keeping their eyes fixed on their commander is again emphasised, and it is pointed out that it is only when this order is observed that the commander can at the last moment effectively change, if necessary, the direction of the attack. It is significant that in the orders regarding the pursuit the old word *Nachhauen*, a survival from the time when the Cavalry had no lances, has only now at last been cut out of this particular paragraph, and special mention is made of the use of the lance in pursuit, in which it is also prescribed that men who, from being mounted on slower or more exhausted horses, have not come up with an enemy, are to be collected together and follow on in a formed body.

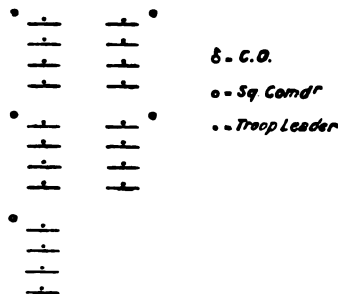
For attacking artillery, infantry or machine-gun detachments it is suggested that the pace need not be so great as against Cavalry, since there is no particular advantage in the increased momentum; losses may be diminished by adopting a single rank formation with wide intervals. When attacking a number of separate groups or when making an attack from several sides, it may be carried out with separate troops. When attacking guns, field or machine, part should make for the detachment, others for the limbers, the gun horses being spared, since the guns can thus more easily be removed when captured. On the 'Rally,' the aim of all must be to quickly form in a closed body without reference to the correct position in the ranks of individuals.

THE REGIMENT

It is now laid down that a *Regiment* consists of from three to five squadrons.

Dismounted action is for the future to be practised regimentally, but, as has been pointed out, regiments which give many detachments can only be thus exercised when brought together periodically for regimental training. From the stress which is laid on paragraph 118 of this section on *gefechtsmässige Ausbildung*, (Training for concentrated action), it is clear that for the future at inspections the efficiency of commanders' of all grades will be gauged less from the fact that their units are never, under any circumstances, in disorder, than from the speed and ease with which order is re-established. There are some alterations in the positions of officers: the major (second-in-command) now rides on the C.O.'s right rear, where he can easily replace him if required, and there is a permanent 'galloper' who rides with the adjutant on the left of the C.O.; when moving in 'double column' the squadron leaders now ride on the outer flanks. N.B.—This 'double column' formation, which is not found in our manual, is recommended as assisting rapid deployment to front or flank: it was not found in the old book.

8



There is an entirely new paragraph regarding the formation of *Staffeln* (echelons) and *Treffen* (supporting lines). When forming *Staffeln* the units, in the absence of orders to the contrary, are led out to the named flank to deploying interval and preserving a distance of 150 metres: they remain as long as possible in a column formation, with a view to an oblique advance followed by a wheel into line to a flank. If several supporting lines are to be formed, the regimental C.O. orders their composition and formation: the distance between lines is between 200 and 300 metres; the major assumes command of the leading line, the C.O. falling back to the second.

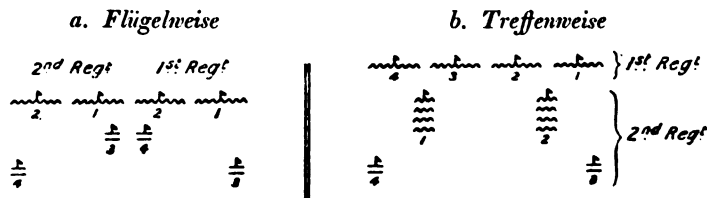
In the *attack*, if the regiment is acting alone, the attack on opposing *Cavalry* is made, as a rule, in line, either with or without *Staffeln*, only exceptionally will a squadron follow as a direct support. The C.O. gives the point of attack to the directing squadron, the remaining squadrons conforming so as to ensure, as far as may be, the attack of all being delivered together. *Staffeln* serve to envelop the opponent's flanks, to ward off flank attacks, to increase the front of the regiment, or for use against portions of the hostile force which may have broken through.

From the above it will be noticed that the use of the 'succour squadron' of the old manual is limited to *exceptional* cases, it being held apparently as a direct loss of the fourth of the strength of a four-squadron regiment for fulfilling a purely secondary object. The *exception* would seem to be meant as in the case of deployment on a narrow front or when a squadron cannot, from its position in the previous formation, get up in line in time with the others. It is claimed that the considerable distance at which the *Staffel* moves (150 metres) makes it peculiarly useful for employment against a small hostile body which may have broken through the first line.

In the *attack on Infantry* the charge may be made in several lines, and, if so ordered, in single rank; the several lines should follow each other tolerably closely so as to prevent Infantry, ridden over by the first line, having time to recover and open fire before the second line is upon them. No portion of the hostile Infantry to be attacked should be left untouched by some body of Cavalry, however small, so that by none may fire be directed on the attacking Cavalry undisturbed. In the *attack on Artillery* the distance between lines should be about 300 metres—the zone of a shrapnel burst.

THE BRIGADE

In the composition of the *Brigade* it is now for the first time laid down that it consists of two or *three* regiments, and that Artillery and machine-guns may be attached to it. Among the general rules for training special mention is made of the training of commanders and leaders, while attention is invited to the need for increased time being given to training in dismounted work. The Brigade Commander gives orders when he wishes one regiment to move in echelon to another; echelon formations within the regiment may be ordered by the Brigade Commander, or, in case of need, by the Regimental C.O. The same rule applies to the adoption of the *Treffen* formation. In the *attack by the Brigade* on Cavalry the regiments will, as a general rule, be disposed *flügelweise* so as to avoid the intermixing of units; in attacking Artillery or Infantry the regiments can be formed either *flügelweise* or *treffenweise*:



It is directed that should any portions of the Brigade find themselves unopposed in the charge, these are at once to place themselves at the disposal of the Brigadier.

THE DIVISION

In the composition of the *Division* an ammunition column is for the first time included. The Divisional Commander is required to see that such manœuvres or exercises as he arranges are specially devised to improve the efficiency of subordinate commanders. During the training opportunity must be taken for

combined working *with* all arms as well as for practice in the attack *upon* all arms. Dismounted work is particularly to be practised in conjunction with mounted action. It is now recognised that it may be necessary for the divisional commander to ride well to the front with his staff, when he should always take an escort with him. All subordinate commanders—Brigadiers, O.C.R.A., and O.C. machine-gun detachment—are to ride with the O.C. division until it is actually necessary for them to command their units; each of these supplies a galloper to the divisional staff. There is no special formation at the halt or in movement laid down for the division; the commander prescribes the general formation of the division, and each brigadier moves his brigade in the formation which he considers most suitable for the utilisation of natural cover, for the avoidance of losses by fire, and in which it can most quickly be brought into action when in the vicinity of the enemy.

The directions for the attack by a division are much the same as for that of a brigade. When the O.C. division has decided to attack, his orders are given first to the R.H.A., then to the O.C. machine-guns, then to the brigadiers, in whose hands is left the actual carrying through of the attack.

The title *Cavalry Corps* is new in the present manual; this unit can be made up during the operations or even on the battle-field by the amalgamation of several divisions.

CONDUCT OF MANŒUVRES

The whole paragraph on 'the conduct of manœuvres' would appear to be new. The dispositions and various arms of the enemy as represented must be invariably either made known beforehand or must be recognisable. A charge against an imaginary or skeleton enemy must always be ridden home, the men representing the skeleton enemy being careful to withdraw in time; when charging Cavalry the halt must be effected twenty paces from the opponent. It was found that in the absence of some such rule the charge came to an end too soon or too late, with the result that even on service the pace was unintentionally checked at the critical moment. In regard to the employment of a skeleton enemy stress is laid upon the need for such, always allowing, for their unavoidably rapid movements, the same time as would be required for those of the actual force they represent: in other respects the commander should be allowed as free a hand as possible. Manœuvres against a skeleton enemy should be practised under varying conditions of strength; he may be superior in numbers to the actual opponent, and may even be so disposed as to represent the methods of foreign armies.

Umpires are required to come to as rapid and convincing a decision as possible in regard to the action of Cavalry, and are to be largely guided by the order and cohesion preserved by the squadrons engaged.

Part II., Training on Foot, is sub-divided into four sections—'General Principles,' 'Training of the Individual,' 'Close Order,' and 'Extended Order.' In regard to all these it is directed that at inspections attention is only to be paid to the test of the individual training in so far as it concerns field service efficiency. In 'drill with arms' the sword and carbine will not, as a rule, be both carried at the same time: pending the issue of the '98 carbine the 'Rifle and Carbine Exercises of 1895' will be retained in use. It is curious to notice that 'volley-

firing' in two ranks is now taught to Cavalry, but its use is held to be 'exceptional.' Up to now the formation of the squadron was different on foot in the barrack square to what it was in the field; henceforth the formation is as far as possible to be the same under all circumstances, and the group is invariably to consist of the same men, whether mounted, on foot, or when dismounted for fire action. 'Piling arms' appears to be new for Cavalry. In extended order the interval between men is to be two paces unless otherwise ordered; a new paragraph directs that the dismounted Cavalry soldier must feel a conviction that by using his fire-arm to the best advantage he can overcome any adversary. Only three signals are now laid down for use dismounted—'extend,' 'bring up reserve ammunition,' and 'bring up led horses.' The individual instruction in skirmishing is to begin immediately after enlistment, and for this purpose the recruit is to be taken as early as possible into the field and taught the elements of musketry, to quickly pick up objectives, judging distance and sight-setting, and the use of ground. Men are to be instructed by groups and not, as heretofore, by files, but the troop is to be the fire-unit when dismounted. Special stress is laid on the rapid formation of a firing line from any order of advance, and, possibly to assist this, troops and groups may be called not by their numbers but by the names of their leaders.

It seems to be taken for granted that dismounted Cavalry will not as a rule fire at decisive ranges, but while requiring that the intensity of fire should be moderated at long distances, it is recognised that the conditions of the Cavalry fire-fight may demand a very intense degree of fire at any distance; among other occasions where the utmost rapidity and increase of volume of fire may be required, the pursuit is specially mentioned, as is also the warding off of a hostile attack by Cavalry. Should dismounted men be required to fall back on their led horses, each man slings the carbine over his back without word of command so as to be in readiness to at once mount on reaching his horse. Dismounted men must act for themselves, when isolated, without awaiting orders. They must be taught to be prepared to act dismounted from any formation, quickly and without noise. The movement of the led horses when only one man in four remains mounted is certainly indicated, but as the lances are laid on the ground by the dismounted men, the horses are practically immobile. Here follow instructions for dismounting half or three-fourths of the squadron. The horse-holders are required to acquaint themselves with the progress of the fire-fight, to guard themselves against surprise by hostile patrols, and so to arrange that every facility is offered for remounting at any moment.

THE COMBAT

Part III. refers chiefly to the Cavalry Division, but the general principles governing its action can be applied to smaller bodies. A Cavalry Division is now fully capable of contending with bodies composed of the three arms, having the support of Artillery and machine guns and being able itself to supply men trained to fight as Infantry: indeed the mounted and the dismounted fight may often be combined. A new paragraph is here introduced wherein it is laid down that while attempts against an enemy's communications may produce results of immense value, such are not to tempt Cavalry to neglect its battle-rôle. The leader is reminded that

the attack dismounted, on a large scale, is something of the nature of a big stake : a dismounted division is only the equivalent of a battalion of riflemen, so that there is an enormous difference between the numbers available dismounted or in the saddle ; von Kleist has said in regard to this : ' ponder over the matter of attack twice mounted, thrice when dismounted.' Commanders are required to keep their units as much under cover from fire as possible, but it is to be understood that units are not to be kept where they cannot quickly and effectively participate in the action. ' Initiative is the first quality required in a leader, concentration of strength a tried means of ensuring victory.' The value to the leader of being in possession of reliable reports on the country in his front is emphasised, but he must not hesitate to push forward when such do not reach him, as may well happen owing to the strength or vigilance of the enemy. The employment of reconnoitring foot-patrols is recommended under certain conditions. While all directions in regard to information, security, &c., should be given by the divisional commander, who can divide certain areas among his subordinate leaders, it is distinctly laid down that units on the flanks are themselves to be responsible, without special orders, for the security of the exposed flank. All information received is to be disseminated among all ranks. In the subsection on the ' Approach March,' it is directed that on nearing the enemy the carbines are to be slung. In the subsection on the ' Attack on Cavalry ' it is curious to note that for the first time the officers are ordered to be in front in the charge—a place which, however, they appear to have invariably occupied ! Even when deeply engaged in the *mêlée* every man should be ready, on the ' call ' sounding, to at once fall in on his leader. No leader must allow his command to break up in the *mêlée* so long as any formed body of the enemy remains in being. In passing over any wide fire-zone commanders should adopt such formations as will entail fewest losses, but on nearing the objective the units *must* again be brought into a suitable formation to meet the Cavalry which may then be expected to oppose them. Since a Cavalry action must usually take the character of a battle of encounter, it is suggested that an echelon formation gives the leader more freedom of action ; when little or nothing is known of the dispositions of the enemy, units should support in echelon on both flanks, or, if one flank is otherwise protected, on one only. Where the commander is thoroughly informed of the position and dispositions of the enemy, he may move in the formation in which his attack, if successful, will be most effective. The attack on the enemy's flank increases in every case the prospect of success : it can even help the weaker side to victory ; there appears now to be no suggestion of an attack upon the rear of opposing Cavalry. A distinction is drawn between the attack merely on the flank of the opposing front line and one upon the flank of the *whole* of the objective : the first results in a mere local success, the second forces the opponent to change his formation at a critical moment, and, if combined with a frontal attack, should have decisive results. An attack upon both flanks postulates overwhelming superiority or an opponent who has not yet deployed. The co-operation of dismounted men is recommended, not only to hold points to cover the deployment of the Division, but even to open fire during the actual charge. Throughout this subsection great importance is attached to the skill and individuality of the commander.

In the *attack on Infantry* the formation must be deep, i.e. in successive lines, and also broad so that no portion of the Infantry objective is left untouched. (See also

'the attack on Infantry' by the regiment.) When attacking unshaken Infantry, if these can be surprised it is more important they should be charged in any formation rather than time should be lost in adopting that already prescribed as most suitable. When cavalry is ordered to charge to gain time for the other arms, as large a body of the enemy should be attacked as possible, or at least threatened, so as to divert his attention from the other arms. In the attack on shaken Infantry formation is of less importance than opportunity.

The *attack on Artillery* refers to that on great lines of guns and not to that on R.H.A. in the purely Cavalry action. Since such lines are usually strongly protected by troops in front, but have no special escort, attack should be directed against their flanks. Under certain circumstances guns firing from behind cover may be approached from the front without undue loss. Heavy field artillery here offers a tempting objective. Even if a Cavalry attack only succeeds in temporarily silencing guns or diverting their fire, a great advantage may thus be secured.

In discussing 'dismounted action' the point is again laboured that only thoroughly trained men take with confidence to the carbine; a half-hearted attack or one initiated by inadequately trained men is already half defeated. Here is repeated in other words what has been already expressed at the beginning of Part II.

In the concluding portion of Part III. the attack on foot generally is thoroughly discussed. Dismounted Cavalry will not be employed so much in the battle itself as in the operations leading up to it: a paragraph here seems to be a lesson from the Boer War—that Cavalry may use its mobility to ride wide on an enemy's flank and seize a favourable position to assist the general attack before the enemy can take measures to prevent such action. Whenever possible, such forces are to be used in the attack as will immediately ensure decisive results; it is a grievous mistake to have begun by using too weak a force and to strengthen it bit by bit. There should usually be a mounted, and there may even on occasion be a dismounted reserve. The mounted reserve is responsible for the protection of the led horses, acts when possible against the enemy's flanks, and during a dismounted fire action endeavours to drive the enemy's reserve from the field, and to capture the led horses. The attack must constantly move forward, and dismounted men should press on to medium ranges without firing. The remainder of the course of the attack is as prescribed in the Infantry Training Manual; the pursuit is taken up by the mounted reserve, and while steps must be taken to secure possession of the position when captured, the dismounted men should quickly be remounted. There is here a new subsection, the heading of which may be translated as 'Fire on-fall,' which describes the effect which Cavalry, profiting by their extreme mobility, may produce by suddenly appearing where least expected, pouring in a heavy and rapid fire from all available carbines, and then rapidly disappearing.

Dismounted Cavalry can be most useful in the defence, their flanks are their weak points owing to the presence of the led horses. The points here noted appear identical with those in the 'Infantry Training,' except so far as the disposal of led horses, &c., is concerned.

In regard to breaking off an action this often depends to some degree upon the position of the led horses; while at extreme ranges an action can usually

without difficulty be broken off, at medium distances it depends upon the country favouring such an operation, while if the attack has pushed well forward it is generally better to carry it resolutely through rather than to break it off. Retirement must be covered by gun and machine-gun fire, by the fire of dismounted men, and by counter attack by the mounted reserve.

The instructions regarding the employment of Horse Artillery are brought into line with those contained in the Artillery Manual. A reason given for attaching guns, field or machine, to detached bodies of the Cavalry division is, that by their fire they may delude the enemy as to the strength of the force they accompany, and may also thus inform the divisional commander that his detachment is in action. The employment of single field guns is permitted, that of isolated machine guns forbidden. Those portions of a hostile line are to be first brought under fire which may influence the initial success of the action; a duel with hostile guns of comparatively equal strength cannot be expected to yield any rapid result, but should the hostile artillery be at any time temporarily exposed, opportunity must be seized to engage it. Fire may also be turned on guns to draw their fire off the Cavalry of one's own force. While the protection of guns is the duty of the nearest unit of either of the other arms, it is now laid down that Artillery should protect itself from surprise by patrols of its own. Guns accompanying the rapid movements of Cavalry must as a rule fire direct, but when acting with dismounted Cavalry indirect fire may occasionally be employed. It seems to be accepted that, considering the brief duration of the Cavalry action, shielded guns can now disregard the fire of the opposing Artillery.

In respect to pursuit on a large scale it is considered best that this be left to the Independent Cavalry in positions of readiness on the flanks. The greatest stress is laid upon the importance of a really vigorous pursuit—the enemy must not only be kept on the run, but he must be headed off from the main roads where he would naturally endeavour to rally; it is recognised that a real pursuit can never be properly simulated at peace manœuvres—all the more reason then that all ranks are thoroughly grounded during peace in the nature of their duties in this respect during a campaign.

Part III. closes with some remarks on the duties of the Strategic and of the Protective and Divisional Cavalry, those of the latter being described as practically identical with those of the former, only on a smaller scale. It is shown that the commander of the Strategic Cavalry has great opportunities of affecting the conduct of a battle or the result of a campaign; raids or anything of the nature of purely independent action by this commander appear to be discouraged, but his intervention in the main action, by large or small bodies, and either mounted or dismounted, is clearly expected of him.

Part IV. of 'Cavalry Training' deals purely with ceremonial, and its contents therefore are not of any special interest or value to British Cavalrymen; but those who are able to study, in the original, the rest of the book cannot fail to appreciate the 'offensive' spirit which it breathes throughout; indeed its dominating note is found in the paragraph from the old Prussian Cavalry Drill book of 1727, which, as stated on the opening page of this notice, has been revived in the Manual of 1909.

RECENT PUBLICATIONS

'The Story of the Household Cavalry.' By Captain Sir George Arthur, Bart., late 2nd Life Guards. Two volumes. (Constable.)

Charmingly written and lavishly illustrated, the *'Story of the Household Cavalry'* is far more than a plain regimental record, for the history of the *'King's Guard,'* dating from the restoration of the monarchy in 1661, is intimately bound up with the political as well as the military events of the times.

Sir George Arthur has had access to many private documents as well as official records, and facts and statistics are skilfully interwoven with brightly told anecdote.

By the student of military history, as well as by officers and men of the Life Guards and the Blues, this story of their peculiar organisation, their privileges, and their deeds will be read with profound interest.

The book is worthy of the distinguished corps whose history it records.

'Life of Major-General Sir John Ardagh.' By his Wife, Susan, Countess of Malmesbury (Lady Ardagh). (John Murray.)

This book is of world-wide interest, dealing as it does with questions of policy not only in Europe, but in China, India, Africa, and America, with the adjustment of most of which questions Sir John was intimately concerned.

He appears in various lights—i.e. soldier, diplomat, and lawyer—and the tale as it is told fills one with admiration for a man of great personal courage and of ready resource in time of difficulty or danger.

The book will be read with undoubted interest by all soldiers.

'Cavalry in Future Wars.' By H.E. Lieut.-General von Bernhardi. Translated by C. S. Goldman, with an Introduction by Sir John French. (John Murray.) Price 10s. 6d.

It is satisfactory to note that this, the most valuable work on Cavalry of the present time, has reached its second English edition. It is a book which not only every Cavalry officer, but every officer of the Army who aspires to the command of a mixed force, should possess and study. General von Bernhardi has recently been appointed to the command of a Prussian Army Corps, and that his views on Cavalry subjects have stood the test of examination by the German General Staff is evident to the reader of the recently issued German *'Cavalry Training.'*

'County Lieutenancies and the Army.' By the Hon. J. W. Fortescue. (Macmillan & Co. 1909.)

The author describes his book as an *'overflow'* volume from the history of the British Army; that he should have been induced by the Secretary of State for

War to give in full the results of his wide researches is a matter of congratulation to civilian as well as to military readers.

Mr. Fortescue traces in turn all the desperate measures and expedients devised by Pitt, by Addington, by Windham, by Castlereagh, and by Liverpool to fill the ranks of the Regular Army during the long-drawn wars of the Napoleonic era; he deals at length with the various Militia and Volunteer Acts, their defects, their enormous cost, and their pitiful results; and finally from it all he draws the obvious lesson that without compulsion neither England nor any other nation can prepare her national forces for a great war in which her very existence is to be the stake.

To quote from the *April Journal of the Royal United Service Institution*:—
'None who read this book can fail to be struck by the recurrence of the same fatuous military policy; the reduction of the Army so soon as peace was declared; the hasty and ill-considered steps for the improvising of an Army on the threat of war; the attitude of inert defence; the failure to profit by the unpreparedness of the enemy; the starving of the Regular Army and the wasted energies displayed in the creation of an enormous defensive force to be available only at home and in the event of an invasion which never came.'

Compulsory service for national defence is the keynote of Mr. Fortescue's teaching; the essence of national defence is 'the offensive,' entailing initiative and the concentration of force at *the decisive point wherever that may be*, not the merely passive defence of the home country and an attitude of expectancy and half-hearted preparation to meet invasion.

'The Russian Army and the Japanese War.' By General Kouropatkin. With Maps and Illustrations. Translated by Captain A. B. Lindsay, 2nd Gourkha Rifles. Edited by Major E. D. Swinton, D.S.O., R.E. Two volumes. (John Murray.) Price 28s.

The original work is in four volumes, the publication of which in Russia was suppressed almost as soon as they appeared.

The translation is of the fourth volume and part of the third only, which deal with the causes of the Russian failure rather than the detailed history of the operations.

Von Moltke wrote after Sedan: 'Let it be called chance, destiny, fortune, or the ways of Providence, men alone have not done it. Conquests so great are essentially *the result of a state of things* which we can neither create nor dominate.'

In these pages General Kouropatkin traces clearly *the state of things* which enabled the Islanders of Japan to triumph over the vast resources of the mighty Czar of all the Russias; their victory was due to no advantage of armament, numbers, or wealth, but to superior national moral and a definite consistent national policy.

The result, as the author shows, was the triumph of well-considered statesmanship which foresaw the inevitable conflict, and, with a single eye to the essential points of the situation, and backed by the determination of a patriotic people, for years devoted all the national energies and all the national resources to the one end, the overthrow of the aggressive Russian power in Manchuria—and, when all was ready, struck. On the other side, the exposure of the weakness, the vacillation, and futility of Russian policy is complete.

The lesson to Englishmen is all the more profoundly valuable when we remember that Japanese statesmanship was learnt in Germany, founded on the philosophy of Clausewitz as taught to them by their German instructor, General von Meckel.

The fundamental cause of the Japanese triumph at Mukden is identical with the fundamental cause of the Prussian triumphs at Königgratz and at Sedan—clear-sighted statesmanship, uncompromising and without sentimentality, that sees the end, deliberately prepares its people morally and physically for the contest, and, as Prince Bülow has recently said, ‘does not hesitate, when the honour and welfare of the Fatherland demands it, to put 100,000 men to the test of the sword.’

Surely for Englishmen Kouropatkin’s Apologia has a special interest.

‘The Russo-Japanese War. Wafangou (Telissu) and Actions preliminary to Liaoyang.’ Prepared in the Historical Section of the German General Staff. Authorised Translation by Karl von Donat. (London: Hugh Rees, Ltd.) Price 20s. 6d. net.

This, the third of the series of historical monographs issued by the German General Staff in Berlin, deals with the operations of General Stackelberg for the relief of Port Arthur; the battle of Wafangou, known to Englishmen as the battle of Telissu, fought June 15; the capture of the Daling Pass by Kuroki June 27, followed by the Japanese occupation of the Motienling and other passes, and Count Keller’s disastrous attempt to retake them in the middle of July; and the battle of Tashihchao and the occupation of Yingkow July 28.

Chapter IV. deals with the situation during the beginning and middle of August, which is perhaps strategically the most interesting period of the war, and should be read side by side with Colonel Kiggell’s chapter in the recent edition of Hamley’s ‘Operations of War.’

Chapters V. and VI. describe the operations of August 26–28 by the three Japanese Armies closing on Liaoyang, and brings the story up to the actual battle of that name, and the volume concludes with the usual pithy comments on the whole course of operations since the action of the Yalu.

The danger of Stackelberg’s southern movement into the defile formed by the mountains occupied by Kuroki on his left and the sea commanded by Togo on his right is emphasised, though had the operation been initiated and carried out with determination and energy it might have been successful. The criticism is chiefly directed against the Russian Commander-in-Chief, whose lack of decision and constant preference for a defensive rather than an offensive attitude emasculated the efforts of his subordinates.

In short, the German General Staff draws from the story the confirmation of accepted axioms, the value of the command of the sea, the invariable superiority of a determined offensive, the value of moral, the influence which the character of the supreme commander must exercise over his subordinates, and the danger of a prepared position, when allowed to dominate rather than support the movements of the Field Army.

‘1806: The Jena Campaign.’ By Colonel F. N. Maude (late R.E.) (Swan, Sonnenschein & Co. Ltd.)

This work, No. 9 of the Special Campaign Series, includes a profound study of the causes which led up to the Prussian disasters, but it finishes, all too soon

for the Cavalry reader, upon the battlefields of Jena and Auerstadt, and tells us nothing of the great strategic Cavalry pursuit which followed.

The first two chapters describe the condition and tactics of the opposing armies ; then follow chapters dealing with the movements of both sides up to October 13, with brief descriptions of the actual battles of the 14th, and finally the author's comments and conclusions.

As a strategic study, and as an exposition of Napoleonic methods, Colonel Maude's work is of the utmost value, and as such we would commend it to the advanced student of military history.

'The Colonies and Imperial Defence.' By Major P. A. Silburn, D.S.O., Member of the Legislative Assembly of Natal. (Longmans, Green & Co., London.) Price 6s.

Coming from the pen of a Colonial gentleman of influence, who has not only had practical experience of war, but has evidently thought much upon the problems he discusses, this work is a valuable addition to our military literature.

'Grant's Campaigns : The Wilderness and Cold Harbor.' By C. F. Atkinson. (London. Hugh Rees. 1908.) Price 7s. 6d.

Though, as its title suggests, this volume deals principally with the operations of the Army of the Potomac from the time when Grant first took supreme command of the Federal Forces, it is also provided with a very clearly written introduction giving a general account of the circumstances which led up to the Secession of the Southern States and of the progress of operations generally from the commencement of the war.

The movements of the Federal Forces in the Wilderness, and subsequently to Spottsylvania and Cold Harbor, are most fully dealt with, while those of the Confederates are sufficiently described to enable the reader to easily follow the operations with the aid of the excellent maps, with which the volume is lavishly provided. It is, however, open to doubt whether the general trend of the narrative is not somewhat marred by the interpolation of platitudinal comments both strategical and tactical.

'The True Story of Andersonville Prison.' A Defence of Major Henry Wirz. By J. M. Page, late 2nd Lieutenant 6th Michigan Cavalry, in collaboration with M. J. Haley. (New York : The Neale Publishing Company. 1908.) Price 8s.

The author was one of the unfortunate individuals who was confined in Andersonville Prison during the latter period of the Civil War in America. During his stay the number of prisoners gradually increased from 2,000 to 30,000 owing to the Federal Government's refusal, in pursuance of its policy of attrition, to make any further exchange of prisoners.

The writer was brought into close contact with the commandant—Major Wirz—and affirms that he was a genuinely humane man, who did his utmost with the slender means at his disposal to mitigate the sufferings of the prisoners, also that these sufferings were in no small measure due to the behaviour of the prisoners themselves, some of whom formed themselves into gangs to rob and murder their comrades.

The latter part of the book gives a list of the different charges that were eventually brought against Wirz in his trial. That it was possible to arrive at a capital

finding on such charges can only be attributed to the extraordinary state of public feeling at the time, for, though charged with having done to death either directly or indirectly thirteen of his prisoners, in no single instance could the name of the prisoner be supplied.

The book is well worth reading in connection with the American Civil War.

‘Four Years under Marse Robert.’ By Robert Stiles, Major of Artillery in the Army of Northern Virginia. Third Edition. (New York: The Neale Publishing Co. 1904.) Price 8s.

Major Stiles’ reminiscences while serving with the Army of Northern Virginia afford most interesting reading, and give a clearer insight into the general life of the rank and file of that Army than is to be gathered from most accounts of this war—in fact, a perusal of this volume is to be recommended before commencing a study of any of the campaigns in which the Army of Northern Virginia was engaged, in order to better comprehend its achievements.

The author enlisted in the Richmond Howitzers after the first battle of Manassas, and served with Lee’s main Army until taken prisoner at Sailor’s Creek in April 1865. Though he received his first commission in the Engineers nearly all his service was passed in the Artillery, and he acted as Adjutant of Cabell’s Battalion in the campaign of ’64. He claims for the Artillery of Lee’s Army that in proportion to its numbers it furnished, perhaps, more officers below the rank of general who were conspicuous for gallantry and high soldiership than either of the other two arms, and adduces some good reasons for his statement.

Major Stiles had the good fortune to be present on some memorable occasions, and to have been personally acquainted with some of the most famous generals in the Confederacy. He describes an interview between Lee and Jackson during the Peninsular Campaign, and his book abounds in accounts of deeds of valour of which he was an eye-witness.

One of the last chapters in the volume compares the methods of bestowing rewards for meritorious service in the two Armies. While the Federal authorities encouraged such conduct by immediate reward, the Confederate Government did practically nothing in this direction. Such a stimulant as promotion in the field was unheard of, for not even Lee himself had the power to make such promotion. To this lack of genuine military recognition, more than to any other cause, save and except the overwhelming material force arranged against them, Major Stiles attributes the failure of the Confederates to win through, and perhaps his contention is not wide of the mark.

‘War with Disease.’ By F. F. Maccabe. Fifth Edition. (Baillière, Tindal & Cox, London. 1909.)

Dr. Maccabe’s volume is well-known amongst officers of the Army. In its original form it consisted of a series of four lectures delivered to officers, N.C.O.s, and men of the Cavalry Brigade at the Curragh in 1906, and the same series of lectures delivered at the Staff College, Camberley, also in 1906, with the addition of a fifth lecture given to recruits of the Cavalry at Dublin and the Curragh, and two lectures on first aid and prevention of disease arranged originally for the ambulance section of the South of Ireland Imperial Yeomanry, of which the author is the medical officer. In the present edition Dr. Maccabe gives a short

Appendix in answer to some criticisms of previous editions. It is unnecessary to examine too closely the matter of a series of lectures which are intentionally popular, and in which, in order to make his points more impressive, the author has in several instances wandered away from strict scientific and historical fact. These shortcomings will not prevent officers, who read and follow his advice, from doing very much towards keeping both themselves and their men fit; and Dr. Maccabe's volume may well take its place in military libraries amongst the numerous other volumes that are now published with that object in view. The language is clear and to the point, and there will be no difficulty in following the author's meaning in his endeavour to initiate laymen into the mysteries and causes of disease and to explain to them the methods of its prevention.

'Notes for Territorial Yeomen.' By Major S. L. Barry, D.S.O., Brigade Major, London Mounted Brigade. Price 3d. (Hugh Rees, Pall Mall.)

A useful compilation in a handy form; designed for use with the Service Message Book, in the pocket of which it can be kept.

A few shillings cannot be better spent by a troop officer than in providing his men with these notes.

Two Lectures recently delivered before the Aldershot Military Society, which Cavalry officers should read, are :—

'The Use of Field Telegraphs in War.' By Colonel A. E. Sandbach, D.S.O., and

'The Problem of our Army Horse, and his Rider and Driver.' By Major-General Sir W. G. Knox, K.C.B.

These pamphlets are published by Hugh Rees at 6d. each.

The following books have also been received :—

'Some Records of the West Kent (Queen's Own) Yeomanry, 1794–1909.' By Lieut.-Colonel J. F. Edmeades, M.V.O. (Andrew Melrose, London.) 5s.

'Applied Principles of Field Fortification for Line Officers.' By Captain J. A. Woodruff, Corps of Engineers, U.S.A., Instructor Department of Engineering Army Staff College, Fort Leavenworth, Kansas. (Ketcheson Printing Co., Leavenworth, Kansas.)

'Hints for Polo Combination.' By Walter Buckmaster. (Vinton & Co., Chancery Lane, W.C.) 1s.

'Universal Service.' By Colonel Sir C. M. Watson, K.C.M.G., C.B. (Hugh Rees.) Price 6d.

'Some Principles of Frontier Mountain Warfare.' By Brevet Major W. D. Bird, D.S.O. (Hugh Rees.) Price 1s.

'An Introduction to the History of Tactics, 1740–1905.' By Captain A. F. Becke, late R.F.A. (Hugh Rees.) Price 3s. 6d.

'Rapid Night Marching made Easy.' By Major W. A. Tilney, 17th Lancers. (Edward Stanford.) Price 2s. 6d.

'Military Cyclist's Vade Mecum.' By Captain A. H. Trapmann. (Forster Groom & Co.) Price 1s.

'Horses and Horsemanship.' By Captain T. A. Polson, City of London Yeomanry. (Baird, Ocean Buildings, Belfast.) Price 1s.

'Squadron Drill Simplified.' By Captain H. Maddick, 5th (Royal Irish) Lancers. (Forster Groom & Co., Charing Cross.) 1s. 6d.

'La Patrouille de Cavalerie sous Toutes ses Formes.' By Capitaine de P——. With 20 sketch maps. (Berger-Levrault, 5 Rue des Beaux Arts, Paris.) 2 Francs.

'Rôle de la Cavalerie dans le Service d'exploration de Surêté et de Couverture.' By Capitaine Janet. (Chapelot, 30 Rue et Passage Dauphine).

'La Cavalerie du Service de deux Ans.' By General de Négrier. (Chapelot). 50 Centimes.

'Reflexions sur le Remaniement de Réglement de Cavalerie.' Translated from the German of General Bernardi. (Chapelot.)

'Der Felsienst der Kavallerie.' By Major General von Fritsch. (Berlin.)

'Das Neue Exerzier Reglement für die Kavallerie.' By Colonel von Unger.

'Das Neue Exerzier Reglement für die Kavallerie.' By Colonel Wenninger. (Vienna.)

Kavalleristische Monatshefte.—The March number opens with a dissertation on 'raids'; the author rather doubts that either the Austrian or the German Army will have any large mounted force to spare for the prosecution of raids, for he holds that the duties of strategical and tactical reconnaissance will fully occupy every single mounted man that either of these nations can set in line. He admits, however, that occasions may arise when raids might successfully be attempted, and points out that such can well be aimed at the enormous convoys required for the supply of modern armies, that further the moral and political effect of a raid will be very useful among a population which knows but little of the real horrors of war, and is less able to withstand them than civilian populations of old days. A raid must, however, have a certain definite aim, there must be nothing of the nature of indiscriminate destruction and wholesale burning or harrying of a country-side.

General von Pelet-Narbonne writes on 'French views regarding training and employment of Cavalry under the two-year period of service'; this is mainly and in the first part a repetition of what may be seen in French military journals, i.e. that the short period of service provides a constant stream of recruits and an ever-diminishing number of men fitted to break in the horses upon which recruits must learn to ride. At the present moment there are enough of such horses in regiments, but it is difficult to see how, as these disappear, they are to be replaced. The rest of the paper is a criticism of the contentions recently put forward in the *Revue des deux Mondes* by General de Négrier in his *La cavalerie et la service de deux ans*.

F. v. T. in a very short paper seems to plead for a fuller recognition of the moral element in the employment of Cavalry, and appears to suggest—and this is now greatly argued by modern German writers—that its successful employment as a *mounted* arm depends entirely on the qualities of the leader and less on the technical means at his disposal. In regard to fire-action of Cavalry the writer holds that it is merely an interruption of the true cavalry fight, that as a rule it is a necessary evil or a protection for inferior against superior Cavalry. There are one or two papers descriptive of particular episodes in old campaigns, and a number of short articles on 'the breaking of remounts,' something about 'reconnaissance' by an officer of the Rumanian Army, and a short account of the

Spahis by a Spanish officer who was specially deputed to North Africa to study the local corps of French Cavalry. There is a description of an elastic waterproof kind of paste called by the inventor 'Schneekitt,' for preventing snow from 'balling' in horses feet, and which is now being experimented with in the German Army.

In the April number Colonel von Walthoffen discusses 'the strategic duty of Cavalry in modern times'; he is against the attachment of an Infantry support carried on wagons when the Cavalry is veiling the forward movement of its own Army, believing that in these days Cavalry should be independent of such support. He lays great stress on the importance of a carefully thought out system for the rapid transmission to the rear of all intelligence gleaned in the front; he describes the duties of the Cavalry at the opening of a campaign, during a battle, and in pursuit, and in regard to the battle he lays down that the *Impuls zur Verfolgung* (Initiation of the Pursuit) must come from the Commander-in-Chief and from him alone, and it would almost appear that Von Walthoffen limits the initiative of the Cavalry commander solely to the maintenance of touch with the retiring enemy. Lieut. Waltzer writes on the schools of Plintzner and Fillis, and shows how dependent at the present day the German Cavalry is upon a combination of both systems in the training of young remounts. Baron von Esebeck has been moved to write an article explanatory of the want of success of the Cavalry of both forces in Manchuria, from a fear that the feeble results achieved by General Trémeau in last year's French manoeuvres with his enormously superior body of Cavalry may lead to a belief that the manoeuvre results were in accordance with the lessons of the spring of 1904. He criticises the early events of the war and points out that neither Cavalry was employed in the situation when this arm is at its best—in the pursuit, the reason being that the Russians never had the opportunity, while the Japanese throughout never possessed the necessary material. An officer of the expeditionary corps writes on the different kinds of horses used in German South-West Africa; he speaks very highly of the South African horse, puts the imported German—mostly from East Prussia—second, and has no single good word to say for the Argentine. Some of the imported animals suffered from being handed over to be ridden by men who had never ridden before, and who were able to come through the ordeal solely owing to the fact that the mounts were so weakened by hunger, thirst, and hard work that they offered no opposition whatever to the elementary efforts of their riders. The writer praises the German regulation saddle, but finds great fault with the English (? Colonial) saddle imported from Cape Colony. At Warmbad he describes seeing 200 of these lying in a courtyard, and for not one of which there was any demand. The officer who writes gives no statistics of horse casualties, but one gathers from the little he says that they were heavy. Of the Colonial horses alone 977 out of an establishment of 4,172 died in one year of horse sickness. Among other short papers is one on 'Compressed Rations for Horses'—in the preparation of which the necessity of *filling* the horse's stomach is frequently, as is here pointed out, overlooked. There is a translation from the *Russian Cavalry Journal* of an article on 'Horse-breeding in the Don District,' and a description of the new Cavalry Bridging equipment of the German Army, each of the wagons of which is for the future to be drawn by six instead of four horses to secure increased mobility.

The May number opens with a *précis* of the main points of the new 'German Cavalry Training'; Colonel Buxbaum pleads for a *Reiterakademie* for the advanced

training of Cavalry commanders; and Major Dichtl, of the 11th Austrian Hussars, writes on the relative advantages and disadvantages of a permanently fixed bayonet for mounted troops. There is not much else in this issue of special interest for British Cavalry men, but in view of the general opinion formed about the Argentine remount during the Boer War, it is interesting to learn that by careful cross-breeding the Argentine military authorities claim to have at last produced a remount which, while preserving the endurance of the original breed, has acquired a much needed tractability. The import of these to Italy has now commenced.

Militär-Wochenblatt.—In the last number of the CAVALRY JOURNAL mention was made of a long-distance ride, described by Imhoff Pasha in an earlier issue of the *Militär-Wochenblatt*, which took place from Adrianople to Stamboul, and in the number dated March 16 details are to hand of a similiar ride undertaken shortly afterwards, but from Stamboul to Adrianople. Four officers, one N.C.O., and four troopers took part: all were mounted on Hungarian horses, none of which were specially trained for the ride, and all of which carried everything as on active service. The horses averaged from 10–13 years. All started in good fettle, one died on the road, but of the remainder all except one reached their destination in good condition. The roads were bad and the weather abominable, and on one stretch of road the way was lost by reason of heavy snow and the horsemen had to find their way by compass. The total distance of about 153 miles was covered in just under 56 hours. In the earlier ride Anatolian horses were ridden, and it is claimed that their superiority over the Hungarians was established. The issue of April 24 contains a review of a history recently published of the Brunswick Hussars, which is of interest to Englishmen in that the corps, as originally raised in 1809, was shortly afterwards taken into British pay, was called the English-Brunswick Regiment of Hussars, served in Spain under Wellington, and finally quitted the British service in 1816. The number of May 13 has an account of the proceedings of the Prussian Remount Department during last year, and from this it appears that more than eleven millions of marks were paid for remounts at an average price of something over £50 apiece, the greater part of the money going to East Prussia, which also supplies some 1,500 remounts to Saxony and Bavaria. A brief abstract of Remount operations is given from the days of Frederick the Great to the present time: apparently in 1817 the average price of Cavalry remounts was £12.

A supplement of the *Militär-Wochenblatt* contains a very comprehensive review of the new 'German Cavalry Training,' which is well worth the study of those able to read German.

Revue de Cavalerie.—The February number opens with a very noble and glowing appreciation of General Geslin de Bourgogne, who, falling a victim to political animosity in 1903, has remained ever since *en disponibilité*, and has now passed into the reserve of officers. By French Cavalry officers of all ranks General de Bourgogne has long been looked upon not only as the foremost Cavalry leader in the Armies of the Republic, but as one of the first Cavalry generals in Europe. Of him the veteran General de Galliffet wrote 'je pleure la mort militaire de l'homme qui résumait toutes les espérances de la cavalerie,' and it seems very certain that, since De Galliffet himself, no French commander has revealed the

qualities of a Cavalry leader to the same degree as has Geslin de Bourgogne, whose career was first checked, and has now been ended, by a political animosity which all soldiers must regret and many must condemn.

Curiously enough the same number contains the last chapter of the articles he has for some time past contributed to this Journal, under the name of 'L'Irrégulier,' on the *École de brigade, de division, d'escadre*. In the current number he selects one day of manœuvres for *exercices de combat d'escadre* against two divisions represented by flags, and describes all that takes place, hour by hour, down to the pow-wow at the close of the day's operations. The greater portion of this, as of preceding and following numbers, is taken up with a somewhat belated translation of Bernhardt's 'Cavalry in Future Wars.' This number contains the last of the *Lettres d'un Dragon* on voluntary enlistments and re-engagements; he admits that the two-years' period of any service is not popular, but pleads that since it has passed into law it is the duty of all loyally to make the best of it, to endeavour to carry it out to advantage, and to cease any more to criticise it. He finds that too many *sous-officiers* are permitted to extend their service, thus blocking promotion and filling that rank with too many men who are no longer young, since at present all are permitted to extend up to fifteen years; he would limit this period to ten years, and ensure a civil appointment to all who then take their discharge. He has further something to say on the breaking of young horses. Henri Choppin, in his 'Souvenirs d'un capitaine de Cavalerie,' describes his return to the Army after a period of captivity in Germany, and gives some notes regarding Generals Chanzy and De Cissey.

In the March number there is a short paper on 'Cavalry and Cyclists,' in which the writer admits a certain hostility of feeling towards wheelmen on the part of Cavalry. He argues that there is some reason for this, since many cyclists aspire to replace Cavalry, that cyclists are frequently during manœuvres formed into large detachments composed of men and commanded by officers who have no idea as to the proper employment of cyclists on service, and who therefore congest all the roads, pedal to the attack, carry out absurd reconnaissances, and being often men who want to get out of marching are usually to be found in wayside public-houses, where, so they say, they have just dismounted to *réparer leurs machines!* The rôle the writer would accord to cyclists is that of a separate arm of mobile Infantry, which in quarters should relieve the Cavalry of much of its night outpost duty, while in the field the cyclists should act as an Infantry support for the mounted body—remarking that *les cyclistes sont précisément faits pour leur permettre de rester à cheval*. He prefers cyclist Infantry to machine-guns as a support for Cavalry, claiming that if a mounted body is held up by Infantry or dismounted men in position, these can only be driven back by at least the threat of an assault, which is not offered by machine-guns and can only be effectually delivered by men with rifles and bayonets. It is clear that the writer is not greatly in favour of the fire-action of Cavalry, and so far as the proportionate strength of a cyclist-body is concerned he would attach to each Cavalry division a battalion of three cyclist companies each of 150-175 men. The 'Souvenirs' conclude in this number with Choppin's retirement from the Service in 1881. By far the most important paper in the April issue of the *Revue* is one entitled *l'instruction des chefs dans la Cavalerie*, in which the author—P.S.—after dilating on the increased importance of the duties of Cavalry and the

curtailment of the time available for instruction therein, decries generally the value of the lessons learnt at peace manœuvres, comes to the conclusion that in the present day everything depends upon the personality and skill of the higher and subordinate commanders, among whom, moreover, there must be *une unité de doctrine complète*. He considers that the existing organisation of the French Cavalry in these distinct categories, each having a different mission, no longer satisfies the needs of modern war; he would have this arm *endivisionnée* both in peace and war, by the union of brigades commanded in peace by those who would lead them in war, and formed into what he calls inspection-divisions, at the head of which should be those who would be called to the command of the corresponding divisions on mobilisation. He proposes an inspector-general at the head of the Cavalry, who should be a member of the *Conseil supérieur de la guerre*, assisted by two or three inspectors who would be told off to the command of Cavalry corps on the outbreak of war. These are to be the leaders of Cavalry opinion or strategy and tactics and should disseminate throughout the subordinate commanders the *doctrine* which all are to absorb and in which all ranks are to be brought up. The main points in this interesting paper are the greatly increased importance attached to the personality and art of the leader, and the small value attached to the lessons which the arm can extract from peace manœuvres as hitherto conducted. Then follows a diary of the operations in which a squadron of the 3rd Chasseurs d'Afrique took part from January to October of last year as part of the Moroccan Expeditionary Force. The 15th Chasseurs have already published extracts from their *Livre d'ordres* during the War in Spain in the years 1812-13, and the April number of the *Revue* contains the first instalment of a continuation of this Record for the period from August 1814 to the close of the campaign in the year following.

Spectateur Militaire.—In the issue dated March 1 Doctor Chomel has a paper on compressed hay as an article of forage: he discusses all the different kinds of grasses and the nutritive elements which each contains or of which it is deficient, the effect of soil, &c., upon hay and the different processes set up in the compressed bale according to the climatic conditions prevailing at the time of hay-making. If rather highly technical, this paper contains a good deal that as a rule only interests or concerns a few specialists. Commandant Niessel continues his study of the tactical lessons of the war in Manchuria; the present article is chiefly concerned with insistence on the need for increased co-operation between the different arms; and in regard to the special action of Cavalry, he considers that the dismounted fire of this arm, coupled with extreme rapidity of movement from point to point and *la menace de l'action à cheval*, will even secure for Cavalry the monopoly of certain strategic missions of the very first importance. These studies are concluded in the issue dated April 1. The number for May 1 contains in *les Manœuvres de Couverture* short accounts of Craufurd's operations on the Coa and the movements of Eugène Beauharnais on the Elbe in 1813—the latter accompanied by Napoleon's instructions to that officer, to Jerome and to General Lauriston.

EDITORIAL NOTES

CAVALRY DIVISIONAL TRAINING 1909

THE training of the Cavalry Division this year will be under Major-General Sir Douglas Haig, K.C.V.O., C.B., Director of Staff Duties, War Office.

His staff will consist of Colonel H. de la P. Gough, 16th Lancers, Major W. H. Greenly, D.S.O., 12th Lancers, Captain P. P. de B. Radcliffe, R.A., and Major F. R. Lawrence, D.S.O., 14th Hussars.

The Brigades taking part in the training will be The Household Brigade; 1st Brigade (3rd Dragoon Guards, 7th Hussars, 16th Lancers); 2nd Brigade (2nd Dragoons, 11th Hussars, 21st Lancers), and 4th Brigade (2nd Dragoon Guards, 5th Lancers, 19th Hussars). The Divisional Troops will be, 8th Brigade Royal Horse Artillery (M. and Q. Batteries) and 4th Brigade Royal Horse Artillery (F. and J. Batteries), under Colonel E. A. Fanshawe, Royal Artillery; 1st, 3rd, and 5th Field Troops, Royal Engineers, and Wireless Telegraph Company Royal Engineers, under Colonel A. E. Sandbach, D.S.O., Royal Engineers.

For the Army Manœuvres the Household and 1st Brigade, 8th Brigade Royal Horse Artillery, 1st Field Troop Royal Engineers, and Wireless Company Royal Engineers, will form the Cavalry Division on the Red Side, *i.e.* the Aldershot Command, under Brigadier-General Allenby; and the 2nd and 4th Brigades, 4th Brigade Royal Horse Artillery, 3rd and 5th Field Troops Royal Engineers will form the Division on the Blue Side, *i.e.* the Eastern and Southern Commands, under Brigadier-General H. D. Fanshawe, C.B.

Brigadier-General Allenby's staff will consist of Major Greenly, Captain Radcliffe, and Major A. A. Kennedy, 3rd Hussars; and Brigadier-General Fanshawe's Staff will be Colonel Gough, Major H. D. De Pree, R.A., and Major R. J. P. Anderson, D.S.O., 11th Hussars.

The 2nd and 4th Cavalry Brigades during the Army Manœuvres and during part of the Divisional Training will be commanded by Colonel W. J. C. Butler and Colonel W. H. Birkbeck, C.B., C.M.G., respectively.

The Household, 2nd and 4th Brigades, 4th Brigade Royal Horse Artillery, and 3rd and 5th Field Troops Royal Engineers, will arrive on Salisbury Plain for Brigade training by August 18, the Household Brigade being camped at West Down North, and the remainder in a new camp at Lark Hill (Camp Hamilton).

The 1st Cavalry Brigade, 8th Brigade Royal Horse Artillery, 1st Field Troop Royal Engineers, and Wireless Company Royal Engineers join the Household Brigade at West Down North by August 28th, and the 4th Dragoon Guards arrive at the other camp on the same date for duty as marked enemy until September 12, and after that date as Divisional Cavalry to the 4th Division. The Division will be encamped thus on Salisbury Plain until September 4, when it will move to two similar standing camps in the neighbourhood of Marlborough.

On September 10, the 1st Cavalry Brigade, 8th Brigade Royal Horse Artillery, 1st Field Troop Wireless Telegraph Company Royal Engineers will leave the Division to join the Aldershot Command Troops in the manœuvre area. On September 16 the Household Cavalry Brigade will leave to join the Aldershot Command Troops for the Army Manœuvres, and on September 17 the remainder of the Division will join the Eastern and Southern Command Troops for the Army Manœuvres.

The Army Manœuvres will take place on September 20, 21 and 22, and on the 23rd all troops will be dispersed.

Cavalry Depôts.—Cavalry Depôts will be formed by the end of the year in each command, except Aldershot, as follows :—

Irish Command, Dublin—for the 4th and 8th Hussars, and the 11th and 13th Hussars.

Scottish Command, Edinburgh, Piers Hill—for the 1st King's Dragoon Guards and 5th Dragoon Guards, and the 1st and 2nd Dragoons.

Northern Command, Scarborough—for the 10th and 18th Hussars, and the 14th and 20th Hussars.

Southern Command, Bristol—for the 3rd and 7th Hussars, and the 15th and 19th Hussars.

Western Command, Seaforth—for the 2nd Dragoon Guards and 6th Dragoons, 3rd Dragoon Guards and 6th Dragoon Guards, and the 4th Dragoon Guards and 7th Dragoon Guards.

Eastern Command, Woolwich—for the 5th and 12th, 9th and 21st, and 16th and 17th Lancers.

The establishment of officers at these Depôts will be a Major in Command, a Captain and three subalterns, with an extra subaltern for the two last-named depôts.

THE WINTER AND SPRING TRAINING OF THE YEOMANRY

As showing what the Yeomanry can do in the way of winter and spring training, it may be interesting to give the course of training of the 3rd and 4th troops, D squadron, West Kent (Q. O.) Yeomanry, between November 1908 and April 1909. It consisted of twenty-one dismounted drills, seven lectures, seven war games, twenty-three riding drills at the R.H.A Barracks, ten mounted drills of two hours each, four complete days in barracks at Woolwich, and one week-end scheme, making a total equivalent to eighty drills. This is exclusive of special riding drills, and instruction for recruits joining somewhat late. It is also exclusive of musketry and firing at miniature ranges carried out at a later date. There was a very high average of attendances. The war games were played on a sand table, the forces never exceeding two troops on either side. They were a source of great interest to the men. The riding drills were held at St. John's Wood Barracks, and the mounted drills at Woolwich, horses being in both cases provided by the Artillery. The Western Troop of the East Kent Yeomanry joined in the later drills and enabled squadron training to begin in March, so that these troops went to camp at the end of May with their squadron training practically finished. That Yeomanry should aim at this whenever it is possible there is little doubt, for it is impossible to combine satisfactorily in one fortnight squadron,

regimental, and brigade training, as well as an inspection. The proposal must entail, in the case of country Yeomanries whose squadron headquarters are not adjacent to Cavalry or Artillery barracks, the expenditure of more money for the hiring of horses and for men's travelling expenses, but it is an expenditure which would yield excellent results.

THE SOUTH AFRICAN CONSTABULARY

On the occasion of the unveiling at St. Alban's Cathedral, Pretoria, of the memorial tablets placed there in memory of Officers, N.C.O.s and men of the South African Constabulary, who died in the Transvaal in the service of their country, His Excellency Lord Selborne took the opportunity of paying a generous tribute to their work.

He said :—

'The South African Constabulary exists no longer. The name is imperishable, and the good work of the officers and men who died or lived remains after them. The S.A.C. was born in the stress and throes of war, and faithfully did its duty on many a hard fought field and through years of stress and strain. The beautiful memorial that we are met to dedicate to-day in this Cathedral is in memory of officers, N.C.O.s, and men who gave their lives for King and country in war, and for those who no less truly and no less devotedly gave their lives for King and country performing their duties in peace. After all, what can a man do more than that? It is the best death, whether in war or in peace, that a man can die—to die simply doing his duty for his King and his country. In that great work of reconstruction after the war the S.A.C. bore a great part. The result of what they have done is to be seen on every farm in the Transvaal. I have spoken about this before elsewhere: I have tried to lift up my testimony to the excellent service of the officers and men of the S.A.C., and I have never spoken too strongly. But in words more eloquent than mine, when he came to be the Ministerial head of the Department of Peace in the Transvaal, and came, from his own personal knowledge, to appreciate the work and service of the S.A.C., the present Attorney-General, Mr. De Villiers, bore testimony to the splendid character of that corps, and to the excellent work they have done.

'I have said that their work is stamped on the veld in every farm in the Transvaal; that is the work of each officer and man in each district, and it is the best. But, as a corps, they have made a great and permanent contribution to the reputation and the tradition of the Civil Service of the Transvaal. A Civil Service wholly divorced from politics is a great blessing to any country. A political Civil Service is a national danger. Why is it that we have an abundant supply of such officers and such men as served in the S.A.C., and as are to be found in the ranks of the whole Civil Service? Why is it that we find such an abundant supply of these men to serve in the police or the Civil Service? Why is it? When many of them could, according to all reasonable calculation, do better for themselves in some sphere of private employment. No doubt the security of Government employ has great attractions. I do not underweigh the effect of that influence on an officer or man who chooses to enter the service of the Government. But there is something beyond that: something higher than that. There is also the instinctive feeling that service for King and country in any form is the highest type of service—the highest type of service open to the ordinary layman.

‘These officers and these men take pride—they take pride in the authority delegated to them from the King. They take pride in the responsibility entrusted to them by their fellow-countrymen. That is a noble pride, and long may it last. And what do we require? what do we require from our police and from the whole of our Civil Service? We ask, in the first place, an untiring devotion to duty. We ask for zealous honesty, we ask for whole-hearted impartiality. Tried by these tests, or by any other test that you can name, the officers and men of the S.A.C. nowhere fail. They have faced the evil-doer and they have died like Samson. They have fought with wild beasts and have died. They have struggled with fever alone, and died. In heat and in cold, in dust and in thirst, they have never strayed from the dull path of daily duty. They have done unnumbered and innumerable acts of kindness for their fellow-men; for the widow and for the children. They have striven to see the King in the poorest and weakest of his subjects. If the whole world is the tomb of famous men, then the whole of the Transvaal is the monument of the South African Constabulary.’

Major C. W. Somerset, of the Indian Army, and Mr. Bentley, of the firm of F. Barker & Co., have recently patented an electrically lighted prismatic compass which can be read as accurately and easily by night as by day. The compass, 3 inches in diameter, is lighted by a ‘Pea’ electric lamp, the accumulator, 5½ inches by 3 inches, being carried in a small leather case attached to the waist-belt. It is made by Messrs. Francis Barker & Son, 12 Clerkenwell Road, E.C.

GERMANY

Cavalry Manœuvres.—Towards the second half of July of this year, General V. Kleist, the German Inspector-General of Cavalry, will conduct operations between the Rhine and Saar, in which two Cavalry Divisions, working against each other, will be tested in reconnaissance. The reconnaissance will take four days, exclusive of coming and going to and from the areas assigned for the purpose. Each side is to be provided with a complete Cavalry Division Staff.

The following troops have been detailed :—

16th Brigade	{ 7th Dragoons.
	{ 7th Lancers. (Saarbrücken).
21st Brigade	{ 6th Dragoons. (Mainz).
	{ 6th Lancers. (Hanau).
25th Brigade	{ 23rd Dragoons. (Darmstadt).
	{ 24th Dragoons. (Darmstadt).
	{ 9th Hussars. (Strasburg).

The Inspector-General of Cavalry will confer with the War Ministry in order to arrange for inter-communication troops.

The standing regulations for manœuvres state that technical appliances for the transmission of news, with all the necessary *personnel*, as laid down in War Establishments, are to be provided for the divisions; but that field artillery and machine guns, however, will only be detailed under special instructions. These

regulations have been temporarily modified to suit the test to be applied by these operations.

Special care is to be taken in practising the location each night of patrols and contact squadrons under war conditions, and great latitude will be granted as to methods applied for the purpose.

Damages to crops and fields are to be avoided as much as possible—a comprehensible request—inasmuch as attacks are not essential to the success of these operations.

New Formations.—A new Cavalry Brigade, the 6th Bavarian Cavalry Brigade, is to be formed in Bavaria on next October 1. This Brigade will consist of the 2nd Chevaulegers, taken from the 2nd Bavarian Cavalry Brigade, and the 7th Chevaulegers, at present the third regiment of the 5th Bavarian Cavalry Brigade.

A new regiment, the 8th Chevaulegers, is also to be formed on the same date, and this will take the place of the 2nd Chevaulegers, in the 2nd Bavarian Cavalry Brigade.

The new regiment is to consist of four squadrons, one being new, and the others will be the 2nd squadron of the 2nd, the 5th squadron of the 4th, and the 2nd squadron of the 5th Chevaulegers. Consequently there will be five Cavalry regiments in the Bavarian Army composed of four squadrons only, namely, the 2nd, 4th, 5th, 7th, and 8th Chevaulegers.

The formation of this one new squadron will bring the total number of squadrons of Cavalry in the German Army up to 500.

New Cavalry Carbine.—The new Cavalry carbine is being rapidly issued. The question of the bayonet superseding the sabre has not yet been settled. It has been decided that it is quite impossible to have both.

JAPAN

The Japanese Cavalry authorities are considering the introduction of a bayonet in addition to the sword and carbine which form their present armament. The weapon will probably be of the present infantry pattern, and will be carried either:—(a) on the body in place of the sword, which would be transferred to the saddle, or (b) attached to the near wallet.

PROBLEM NO. VIII

N. C. Officers are reminded that the latest date by which solutions of the above can be received is September 15, 1909.

SPORTING NOTES

RACING

The historic Derby of 1909 will ever live in the memory of those privileged to witness it. After the most thrilling race a sheet would have covered the first four horses as, desperately and ably ridden, they passed the winning post. His Majesty the King's horse Minoru had won by the shortest of heads. The scene that followed beggars description.

The joy and intense enthusiasm was so great that men and women alike had tears running down their faces and felt lumps in their throats. A terrific roaring of cheers was followed by the people sweeping away the strong cordons of police and simply packing the course in front of the enclosure. Into the midst of this seething mass the King himself walked out on to the course to receive his horse; the efforts of the police, the Prince of Wales, Lord Marcus Beresford and immediate attendants to protect His Majesty were powerless, but the people formed their own police and cleared what seemed impossible, viz. an opening for the King to receive his horse and lead it back to the enclosure. Then from the throats of tens of thousands with mighty voice there rose the National Anthem.

There was but one jar to this great race, and it was that the American horse Sir Martin, which started favourite, had slipped up and fallen. All regretted this; but it was noticed that Americans and other sportsmen who stood to win fortunes over other horses that had failed, were alike cheering lustily at the King's victory.

God Save the King.

The 1st Cavalry Brigade Steeplechases took place at Aldershot. The 16th Lancers Regimental Challenge Cup was a great race resulting in a dead heat between Captain C. L. K. Campbell's Playfair (owner) and Mr. Malise Graham's Weathercock (Mr. G. Brooke). A Hunters' Steeplechase was won by Captain C. L. K. Campbell's Elmwood II (owner). Both this horse and Playfair had been imported by Captain Campbell from New Zealand. The 3rd Dragoon Guards Regimental Challenge Cup fell to Mr. N. K. Worthington's Sheila IV (owner). The Cavalry Brigade Plate was taken by Mr. Malise Graham's Weathercock (Mr. Brooke).

The 7th Hussars Regimental Challenge Cup was won by Mr. E. G. K. Cross's Red Deer IV (owner), and Mr. D. McCalmont (7th Hussars) rode his horse N. B. to victory in the Hurdle Race Plate.

On the following day at Aldershot the Royal Artillery held their races. It was a capital meeting: the coveted Royal Artillery Gold Cup, a 3 mile steeplechase value 200 sovs., was won by Colonel Chance's Hebe with Mr. A. P. Henzage in the saddle.

The usual great gathering of sportsmen for the Kildare races at Punchestown witnessed magnificent sport. On the first day the veteran Mr. Harry Beasley, now in his fifty-fifth year, achieved a most popular victory on his own horse, St Columbus, in the Kildare Hunt Cup. Captain H. Chippendale Higgin's Useful won the Maiden Plate. Colonel Kirkwood's Paddy Maher, ridden by Mr. O'B. Butler, won the Prince of Wales's Plate and Captain A. L. Keogh's Gold Mohur, Mr. Currell riding, won the Irish Maiden Military Steeplechase. In this race the Hon. R. Bruce had the misfortune to break his elbow through the falling of his mount. On the concluding day the Irish Grand Military was won by Captain C. I. C. Barrett's (R.S.F.) Scarlet Runner, Mr. O'B. Butler riding, and Captain W. A. Pallin on his own horse Wild Fox III took the Conyngham Cup.

The Steeplechase season was concluded by a successful meeting at Aldershot at the end of April, at which the Farnham Handicap steeplechase was won by Captain R. C. de Crespigny's Warner; the Past and Present Military Handicap Steeplechase by Captain G. Paynter's Ards Rover (owner); the Tally Ho Steeplechase by Captain F. Walwyn's Spinner (Mr. C. T. Walwyn); and the Aldershot Command Light Weight Steeplechase by Captain A. E. W. Harman's Snapshot (Mr. N. K. Worthington).

POLO

The 9th Lancers have won the South African Championship, beating the 4th Hussars in the final by 8 goals to 3.

THE INTER-REGIMENTAL TOURNAMENT

There were seventeen entries for this popular tournament. In the second round the 16th Lancers beat the 7th Hussars at Aldershot by 7 to 6 goals. This was a fine match, the sides being very equal. At Roehampton the 4th Dragoon Guards defeated the 2nd Life Guards. In the semi-finals the Royal Horse Guards beat the 4th Dragoon Guards by 6 to 2 at Ranelagh, and the Royal Scots Greys were victorious over the 20th Hussars at Roehampton by 6 to 2. A splendid contest took place at Hurlingham between the 11th Hussars and 16th Lancers. At the end of the fifth period Captain Campbell, of the Lancers, had a bad fall owing to a cross, and was unfortunately disabled. The 16th Lancers, refusing their right to designate any one of the Hussars to retire, brought in their spare man, Mr. Graham, to take Captain Campbell's place. At the call of time the score was 6 goals all, but after six minutes' extra play the 11th Hussars hit the winning goal. At Ranelagh the Royal Horse Guards beat the Royal Scots Greys by 8 to 2. In the final between the Royal Horse Guards and the 11th Hussars played on July 10 the latter were victorious by 7 goals to 5, after a hard match.

The feature of polo in England this year has been the fine play of the American team, Meadowbrook (U.S.A.), who in the two test matches for the International Cup have decisively beaten England. In the first match they won by 9 goals to 5, and in the second by 8 to 2. The players were:—America: Mr. L. Waterbury, Mr. M. Waterbury, Mr. H. P. Whitney, and Mr. D. Milburn (back); England: Mr. Harry Rich, Mr. F. M. Freake, Mr. P. Nickalls, and Captain Lloyd (back).

The American team was the same in both matches, but Mr. Rich and Captain Lloyd replaced Mr. Wilson and Lord Wodehouse, who played for England in the first match. The Americans gave a splendid exhibition of polo; they were better mounted than our representatives, quicker on the ball, their striking was cleaner and harder, and in front of goal they were deadly accurate. It was known last year that the Americans intended, if possible, to wrest the cup from us, but we allowed them to buy up most of our best ponies, and accepted their challenge late, without having made adequate preparations. It was unfortunate that two of our best players, Mr. Buckmaster and Mr. C. Miller, were disabled, and so unable to play. The Americans, however, prepared for the contest in the most sporting and business-like way, and most thoroughly deserved their victory.

The 11th Hussars put up one of the best matches of the season against the Americans, and another fine military team is that of the Cavalry School, which is, perhaps, the best we have had for many years.

INTERNATIONAL HORSE SHOW

The International Horse Show at Olympia was one of the greatest Sporting events of the year and attracted multitudes of people. The feature of the chief day, when their Majesties the King and Queen visited the Show, was of course the jumping contest between the nations for King Edward the Seventh's Gold Cup, valued at £500. Each nation was represented by three officers (in uniform) as follows:

ENGLAND

Lieut. Geoffrey Brooke, on Alice.
Lieut. Worthington, on Spook.
Lieut. Malise Graham, on Luxury.

FRANCE

Capt. Berille, on Jubilee.
Capt. Cariou, on Doomsday.
Lieut. Broudehous, on Heroide.

ITALY

Lieut. Bianchetti, on Murzuff.
Lieut. Morosini, on Jupiter.
Lieut. Trissino, on Palanca.

BELGIUM

Lieut. Ripot, on Miss Kitty.
Lieut. Van den Corput, on Miss Jenny.
Lieut. du Roy de Blicquy, on Storm King.

CANADA

Capt. Young, on Sir Edward.
Lieut. Leonard, on Sir Frederick.
Lieut. Proctor, on The Master.

ARGENTINE

Lieut. Ramirez, on Falstaff.
Lieut. S. Casares, on Good Boy.
Lieut. Cezar, on Casador.

All the twelve jumps, which have previously been described in this journal, were fair with the exception of the row of dummy soldiers wearing black busbies; this jump was generally considered out of place and ridiculous and treated as such by the horses. The competitors jumped the course singly. The first to jump were the Argentine officers. They rode clever horses, but most made mistakes at the gate. The Belgians, who followed, soon put themselves out of the running. The Canadians were loudly cheered on making their entry and did fairly well, and of the Englishmen the first to go round was Lieut. Brooke, 16th Lancers, whose mare Alice, a clever jumper, jumped big, but made a mistake at the wall. Lieut. Worthington, 3rd Dragoon Guards, followed on his grey, which

crashed through the gate and lost points at another jump. Lieut. Graham, 16th Lancers, rode a hot sort well and did the best individual round of the whole competition, making only one mistake at the dummies. The Frenchmen who followed did splendidly. Captain Berille on Jubilee only made one mistake at the dummies, Doomsday only bungled at the gate, while Heroide only made three slight mistakes. The Italians, who came last, also did well and beat England, the placings being France 1st, Italy 2nd, $2\frac{1}{2}$ faults more than France, and England 3rd, $7\frac{1}{2}$ faults more than Italy. The winning team then entered the ring, dismounted, and ascended to the Royal Box, where the King and Queen congratulated them on their riding and presented to them the trophy.

The officers' heavy weight chargers, for which Lord Lonsdale gave the first prize of £25, made a fine show and all the prizes were taken by English officers, viz. Hon. A. H. Strutt's (Life Guards) bl. g. Black Boy, 1st; Captain Harold Brassey's bl. g. Othello, 2nd; Lord Vivian's bl. g. Shamrock, 3rd; Colonel Wilson's bl. g. Brampton, 4th; Colonel Ernest de Linder's (France) b. g. Savuna, 5th. The officers' light weight chargers, open to all nations, resulted as follows: Lieut.-Colonel A. V. H. Vaughan-Lee's (Royal Horse Guards) bl. g. Maxim, 1; Mr. A. Martiney de Hoy's (Buenos Ayres) ch. g. Pom Pom, 2; Captain P. W. Dayer Smith's (County of London Yeomanry), ch. g. Cadogan Ideal, 3; Lieut. du Roy de Blicquy et d' Hendecourt's (Belgium) ch. m. Rebecca, 4; Captain Crouse's (France) c. g. Doomsday, 5; Lieut. Malcolm Borwick's (2nd Dragoons) br. m. Fairy, reserve.

The Territorial Challenge Cup for Jumping by teams of three members of any Territorial unit was won by the Staffordshire Yeomanry (Captain B. Hardy, Lieut. C. R. H. Wiggin, and Sergeant York). The Derbyshire Yeomanry, Herts Yeomanry, County of London Yeomanry, Notts Royal Horse Artillery, Surrey Yeomanry, and Westmoreland and Cumberland Yeomanry also competed.

The magnificent cup given by H. R. H. the Duke of Connaught for jumping by British officers was won by Lieut. Brooke, 16th Lancers, on Alice. Several Canadian officers did well, but were unlucky. Lieut. Brooke was congratulated on his riding by the Princess Royal, who presented the Cup from the Royal Box. The Reserve went to Lieut. Worthington (3rd Dragoon Guards) on his popular grey mare Spook.

The jumping competition open to the world was won by Lieut. Bianchetti's (Italy) ch. g. Murzuff with Mr. A. Leuwenstein's (Belgium) Miss Dainty and Pouff second and third.

Some fine high jumping competitions also took place in which Captain Berille's b. m. Jubilee was credited with clearing 7 feet 4 inches.

The Marathon race for four-in-hands over $10\frac{1}{2}$ miles was another sporting event which resulted in a win for Mr. Vanderbilt's greys.

The Richmond Horse Show which followed the great Olympia Show was a record success. Eighteen officers in uniform contested the jumping competition for the 'Teck' Cup, value £60, a splendid trophy. The winner was Lieut. P. Thwaite's Prussian Eagle, with Major C. Beddington's Bag o' Tricks 2nd, Captain C. A. Lafone's Arthur 3rd, and Lieut. M. Graham's Luxury 4th.

The high jumping went to Mr. James Glencross's Tradesman, 6 feet 5 inches, with Lieut.-Colonel W. H. Evans's Confidence, 6 feet 3 inches, second.

NAVAL AND MILITARY TOURNAMENT

The Royal Naval and Military Tournament was as popular and successful as ever this year. It was honoured with their presence by their Majesties the King and Queen, the Prince and Princess of Wales, and nearly all the members of the Royal Family. Her Majesty the Queen graciously gave up her arrangements to go to Epsom races with the King, who was running a horse in the Oaks that day, in order to visit the Tournament. A familiar figure at these shows will, alas! be seen no more, for Capt. G. Dann, R.H.A., who was for sixteen years steward of the arena, passed away on the last day. A new feature of the Tournament was the jumping competition under Olympia rules, for the selection of the team to represent Great Britain in the International Show. This is an art of fine horsemanship which has not hitherto been studied by us as in Continental armies, but a great improvement on last year has already been shown.

Of the 125 entries the following qualified for the final :—

Rank and Name	Regiment	Name of Horse	Remarks
Major H. A. Thompson	3rd Dragoon Guards	Shamrock	{ Ridden by Lieut. Owston, 3rd Dragoon Gds.
Lieut L. V. Owston	3rd Dragoon Guards	Midget	
2nd Lieut. N. K. Worthington	3rd Dragoon Guards	Spook	
Lieut. M. Borwick	2nd Dragoons	Furzey	—
Major A. A. Kennedy	3rd Hussars	Common	—
		Baronet	—
Major Hon. J. G. Beresford, D.S.O.	7th Hussars	Julliette	{ Ridden by Lieut. P. L. E. Walker, 7th Hussars
Major Hon. J. G. Beresford, D.S.O.	7th Hussars	Flighty	
Capt. A. B. Pollok	7th Hussars	Broncho	{ Ridden by Lieut. M. Graham, 16th Lancers
Major F. W. Wormald, D.S.O.	8th Hussars	Tommy	
Major R. J. P. Anderson, D.S.O.	11th Hussars	Biddy	—
Lieut. M. Graham	16th Lancers	Luxury	—
Lieut. G. F. Brooke	16th Lancers	Alice	—
Lieut. G. F. Brooke	16th Lancers	Harriet	—
Lieut. G. F. Brooke	16th Lancers	Albert	—
2nd Lieut. C. F. Dugdale	16th Lancers	Red Pat	—
2nd Lieut. T. L. Horn	16th Lancers	Etna	—
Lieut. M. Graham	16th Lancers	Chandon	{ Ridden by 2nd Lt. R. A. J. Beech, 16th Lancers
2nd Lieut. J. W. Cobb	16th Hussars	The Fizzer	
2nd Lieut. T. C. Hetherington	18th Hussars	Fly-by-night	—
Major G. D. Franks	19th Hussars	Toby	—
2nd Lieut. G. W. Dobson	19th Hussars	George	—
2nd Lieut. W. E. Lyon	19th Hussars	Leo	—
2nd Lieut. F. Waldron	19th Hussars	Mascotte	—
Lieut. G. Bonham Carter	19th Hussars	Ruddy	—
Col. P. A. Kenna, V.C. D.S.O. A.D.C.	21st Lancers	Harmony	—
Major C Beddington	Westmoreland and Cumberland Yeomanry	Bag-o'-tricks	—
Lieut. P. G. York	Riding Est. R.A.	Scanty	—
Lieut. E. E. Rich	Riding Est. R.A.	Sailor	—
Lieut. H. B. Sweet-Escott	Royal Engineers	Robert	—

The eventual winners were :—

Lieut. G. E. Brooke, 16th Lancers, 1st; Lieut. N. K. Worthington, 3rd Dragoon Guards, 2nd; Lieut. M. Graham, 16th Lancers, 3rd; equal fourth, 2nd Lieut. J. W. Cobb, 18th Hussars, and Lieut. Brooke (on his second mount).

The Navy and Army Championships resulted as follows :—

Heads and Posts.—Lieut. D. W. Godfree, 21st Lancers, 1st; Major H. M. Poore, D.S.O., 7th Hussars, 2nd; Sergeant D. A. Cathcart, 21st Lancers, 3rd.

Lemon Cutting.—Major W. H. King, Royal Horse Guards, 1st; Captain D. Aherne, Riding Establishment, 2nd; Sq. Sergeant-Major P. Mordaunt, 18th Hussars, 3rd.

Tent Pegging.—Sq. Sergeant-Major E. Broadley, Norfolk Yeomanry, 1st; Major G. Matthew-Lannowe, Royal Artillery, 2nd; Sergeant T. Linfield, Army Service Corps, 3rd.

Sword v. Sword.—Lieut. H. Boyd-Rochfort, 21st Lancers, 1st; Captain C. Vander Byl, 16th Lancers, 2nd; Corporal of Horse Paulin, 1st Life Guards, 3rd.

Foil v. Foil.—Lieut. J. Betts, Army Gymnastic Staff, 1st; Quarter-Master-Sergeant W. Palmer, Army Gymnastic Staff, 2nd; Captain R. M. P. Willoughby, 9th County of London Regiment, 3rd.

Sword v. Lance (Mounted).—Lieut. H. Boyd-Rochfort, 21st Lancers, 1st; Sq. Sergeant-Major Cooper, 11th Hussars, 2nd; Sq. Sergeant-Major Gittings, 2nd Dragoon Guards, 3rd.

Sabre v. Sabre (Dismounted).—Lieut. J. Betts, Army Gymnastic Staff, 1st Corporal of Horse H. Granger, Royal Horse Guards, 2nd; Corporal-Major W. Elliott, 2nd Life Guards, 3rd.

Bayonet v. Bayonet.—Gunner Richardson, R.M.A., 1st; Corp. H. C. Randall, R.M.A., 2nd; Corporal-Major W. Elliott, 2nd Life Guards, 3rd.

The riding and jumping competition by sections of Regular Cavalry was won by the 19th Hussars.

The best man-at-arms in the mounted events was Lieut. H. Boyd-Rochfort, and in the dismounted events, Lieut. Betts.

BOXING

The results of the South African Army and Navy Championships were :—

Middle-weights: A. B. Gamble, H.M.S. Hermione.

Feather-weights: Private Leahan, 2nd Welsh Regiment.

Light-weights: Shoeing Smith Hogg, Army Veterinary Corps.

Heavy-weights: Corporal Anderson, 9th Lancers.

The all India Tournament took place at Umballa. Results :—

Feather-weights: Corporal Blackman, 10th Hussars.

Light-weights: Private Christian, 1st Lancashire Fusiliers.

Bantam-weights: Private Banyard, 1st Lancashire Fusiliers.

Middle-weights: Private Fletcher, 1st Lancashire Fusiliers.

Six-round contest: Lance-Corporal Alberts, 12th Lancers.

The Inniskilling Dragoons at Mhow, and the 13th Hussars at Bolarum have recently held excellent boxing tournaments, as also have many regiments at home, where boxing is as popular as ever.

CRICKET

The annual three-day match between officers of the Royal Navy and Army took place at Lords. Good cricket was witnessed, and after a most interesting match the Army gained a meritorious victory by six wickets. Full Score.

NAVY			
1st innings		2nd innings	
Lieut. F. O. B. Wilson, c Poore, b Fawcuss	18	c Legard, b Wigram	57
Lieut. G. C. Harrison, b. Legard	1	c Du Boulay, b Fawcuss	46
Staff-Surgeon R. H. Mornement, c Yates, b Fawcuss	4	b. Lupton	26
Captain H. F. Montgomery, c Robinson, b Wigram	10	b Du Boulay	3
Commander C. L. Lewin, c Wigram, b Fawcuss	8	c Wigram, b Fawcuss	0
Assistant-Paymaster F. L. Horsey, c Fawcuss, b Wigram	0	b Lupton	17
Lieut. M. C. Festing, run out	3	b Fawcuss	15
Lieut. H. J. Orr, b Wigram	11	c and b Fawcuss	27
Captain W. W. Godfrey, c Mulholland, b Lupton	6	not out	51
Sub-Lieut. E. N. Syfret, not out	0	c Robinson, b Wigram	42
Lieut. A. A. Scott, c Legard, b Lupton	5	b Lupton	8
Byes	6	Byes 5, 1-b 5	10
Total	72	Total	302

ARMY			
1st innings		2nd innings	
Major E. R. Bradford, c Syfret, b Wilson	17	b Scott	19
Captain A. D. Legard, c Lewin, b Orr	15	b Montgomery	10
Captain A. C. G. Luther, c Orr, b Syfret	25	b Mornement	10
Captain A. H. Du Boulay, c Godfrey, b Wilson	24	b Scott	6
Major C. Wigram, b Wilson	4	not out.	73
Hon. A. E. S. Mulholland, b Scott	39	not out	47
Major R. M. Poore, run out	51		
H. W. M. Yates, c Montgomery, b Syfret	2		
D. C. Robinson, b Orr	1		
Captain H. B. Fawcuss, not out	1		
Captain A. W. Lupton, c and b Orr	1		
Byes 15, 1-b 2, w 1, n-b 1	19	Byes 7, 1-b 4	11
Total	199	Total (4 wkts.)	176

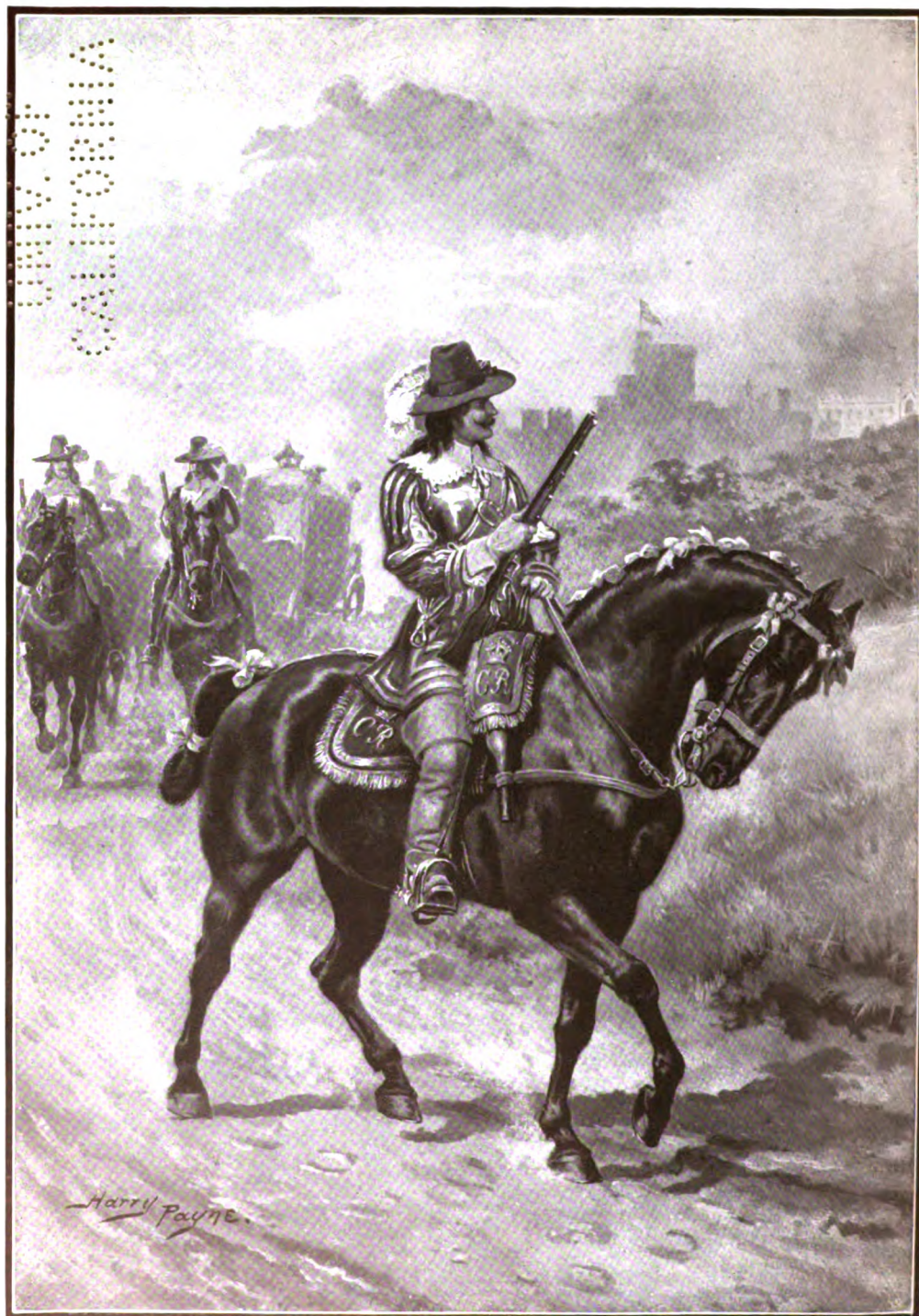
In the previous annual match, played at Portsmouth, the result was a draw, the Royal Navy making 410 and 146 (for 6 wickets) and the Army 340.

GOLF

The competitions for the Inter-Regimental Cup took place at Bramshot. Fourteen teams entered, and in the final the Royal Horse Artillery defeated the 2nd Battalion Royal Irish Rifles by four and a half points to none.

The Service Clubs competitions were played as usual on the Sunningdale Golf Club links, and the Naval and Military Club again won, beating the Junior United Service Club in the final by seven matches to five.

350



A ROYAL PROGRESS.

1660.

THE CAVALRY JOURNAL

OCTOBER 1909

THE CAVALRY DIVISION IN THE EGYPTIAN CAMPAIGN OF 1882

By COLONEL W. H. BIRKBECK, C.B., C.M.G.

(From the Official Account of the War)

CAVALRY Training, 1907, speaks as follows:—

‘The pursuit is the special duty of Cavalry, and the demands which it will make upon horses must ever be present to the Cavalry Commander, who, during the earlier phases of action, must ever bear in mind the necessity of being prepared to pursue.’—Section 161.

‘Pursuit may be of two kinds, direct (or tactical) and strategical. The former will be checked when the retreating army has rallied, in which case the latter may be undertaken, and will consist in strategical action directed against the enemy’s depots, bases in rear, or lines of communication.’—Section 144.

In the old Cavalry Drill of the eighties, there was no such clear indication of the strategic pursuit as the above, yet one of the most perfect instances of such a successful use of Cavalry is afforded by Lord Wolseley’s conduct of the Campaign against Arabi, in Egypt, in 1882.

It is unnecessary here to recapitulate in detail the events that necessitated the despatch of the expedition to Egypt:—

namely, the assumption by Arabi of a Military Dictatorship, with the scarcely veiled support of the Sultan, his hostility to Europeans, and the consequent insecurity of the Suez Canal; it is sufficient to note that England was compelled to intervene to safeguard her interests. The very first appreciation of the military situation, dated July 3, 1882, by Sir Garnet Wolseley, Adjutant General, contemplated a landing at Ismailia with two Divisions of Infantry and a Brigade of Cavalry complete with regimental transport. The advance to Cairo was to follow the railway through Zagazig, for the working of which rolling stock and Royal Engineers' personnel sufficient to run four trains was to accompany the expedition.

'This,' wrote Sir Garnet, 'will enable us to cut down our transport very much, especially as it may be expected that the Egyptian army would make its stand somewhere in the neighbourhood of Tel-el-Kebir.'

'If the action comes off there, no serious fighting may be anticipated until Cairo is reached; indeed, although it is possible that some attempt might be made to hold that city, if the Egyptian Army is well defeated in the field and *vigorously pursued*, any further resistance would be insignificant.'

Thus the Commander designate of the Expeditionary Force formulated at the outset a clear, simple and correct strategic plan.

- (a) To operate by one line.
- (b) To defeat the enemy's Field Army.
- (c) To reap the fruits of his victory by the immediate occupation of the enemy's capital, in this case the vital point.

The choice of this line of operations was confirmed by subsequent developments, and the following considerations.

The expedition was to be a joint one (a contingent from India being added to the original force), and Ismailia, midway between Port Said and Suez, was the natural point of junction.

From Ismailia to Cairo the distance is 75 miles, whereas from Alexandria to Cairo it is 120 miles.

During August, September and October, the period of 'high Nile,' the whole Delta is laid under water by means of the irrigation works, and communication through the cultivated portion is well-nigh impossible.

From Alexandria to Cairo the country is all cultivated; from Ismailia to Cairo it is all desert, and nearly all of it hard desert, i.e. firm gravel as opposed to heavy sand.

A decisive action in the desert was to be hoped for, where the full power of an organised army could be best employed, and everything pointed to the probability that Arabi, the champion of the fellaheen, would, if assailed from Ismailia, stand in works of defence *covering the cultivated district*, and as such works were known to have been contemplated in the neighbourhood of the station of Tel-el-Kebir, of which Arabi had once been Commandant, that appeared to be the most probable battlefield.

The immediate occupation of Cairo must follow, to save the city from destruction and end the war at one blow; for that purpose a Cavalry Division of two Brigades was made available, and from Ismailia the hard desert led right up to the gates of the city.

From the very outset then, it will be seen that Sir Garnet Wolseley contemplated a strategic Cavalry pursuit.

Surprise is one of the essential elements of success, and in concealing his intended point of disembarkation, Sir Garnet was assisted by circumstances, and curiously enough by the whole hostile Press of Europe.

On July 6, it had been decided to concentrate a small expedition, under Sir A. Alison, at Cyprus, ready, if necessary, to seize the Suez Canal within twenty-four hours of the receipt of orders, and by the middle of July this force—2 Battalions and 1 Company R.E.—was ready.

Meanwhile events had been moving rapidly at Alexandria. On July 11, Sir Beauchamp Seymour's squadron bombarded the forts which Arabi was erecting in defiance of the Khedive's orders, and the consequent confusion and pillage necessitated the landing of troops to keep order.

Sir A. Alison's troops were therefore moved from Cyprus and landed at Alexandria on July 17-18, when, including seamen and marines, the British force in Egypt numbered 3755.

Arabi's army, about 6000 men, lay outside, 14 miles distant, and arrangements were immediately made for the defence of the town.

So far all that had been done at Alexandria had consisted of measures necessary to secure the town from Arabi and from marauders—serious intervention on behalf of the Khedive had not been finally decided upon.

On July 20, the French and English Cabinets, failing to induce the Porte to suppress the disorder, decided to send a joint expedition for the purpose.

On July 25, the Reserves were called out ; on July 27, the House of Commons voted the necessary credit by a majority of 275 to 19, and on July 29, the French Chambers, by a majority of 416 to 75, refused any credit whatsoever for the expedition.

England therefore acted alone.

The presence of a part of his Expeditionary Force at Alexandria, was not in accordance with his plan of campaign, but Sir Garnet at once took advantage of it to conceal his real objective, and telegraphed to Sir A. Alison to 'keep Arabi constantly alarmed,' giving out at the same time, that the remainder of the Expedition was destined to land at Alexandria.

Sir A. Alison did his work well : every war correspondent in Europe rushed to Alexandria, and all the papers were full of accounts of the 'aimless skirmishing' round Alexandria and the incompetence of the British Government and its Generals. Behind this admirable screen, the plan kept constantly in view, since Sir Garnet's first appreciation of July 3, was developed and put into execution.

The first transport—the *Orient*—of the 1st Division left the Thames on July 30, with orders to call at Malta, whence all transports were directed to Alexandria.

The *Orient* reached Alexandria on August 10, and Sir Garnet himself landed there on August 15.

The situation on that date was as follows :—

Reports showed that by August 19, the 1st Division transports would have all reached Alexandria, while the Cavalry Brigade, which was at sea, could be directed to Ismailia as soon as it was possible for them to land. The Indian contingent had sailed.

Arabi was still looking towards Alexandria, but preparations were being made to resist any detached force which might move on the Delta from the Suez Canal, and the old military station of Tel-el-Kebir was being placed in a state of defence.

Sir Garnet, therefore, on August 16, worked out with Sir Beauchamp Seymour the seizure of the Canal, under the authority of the Khedive's written mandate, and by dawn on August 20, the water-way was in British hands and the passage clear for the concentration at Ismailia of both the British and Indian contingents.

To return to Alexandria, everything had been arranged for the movement of the 1st Division and the Cavalry on the 19th, so as to arrive at Port Said at dawn on the 20th, but, to keep up the deception, orders were issued on the 18th for a combined attack on Arabi's position before Alexandria by the 2nd Division from that town, and the 1st Division from Aboukir, whither they were to be moved by sea.

At noon on the 19th the transports sailed for Aboukir, where they remained till nightfall, when the small craft were sent close in shore to open fire, and the rest of the fleet steamed off to Port Said.

Sir Garnet landed at Ismailia at 9 A.M. on the 21st; by the 22nd communication by land was secured with the Indian contingent landing at Suez, and by the evening of 23rd, about 10,000 British troops were ashore; on August 25 the enemy's camp at Mahsama was taken by the Cavalry, and on August 26 Kassassin was occupied by General Graham's Infantry Brigade.

The Egyptian positions had been as follows :—

15,000 at Kafr-ed-Dauar, 15,000 at Aboukir, Rosetta and Burlus, 7000 at Damietta, 12,000, at Tel-el-Kebir, Mahsama and Es Salihiyeh, 11,000 at Cairo.

Then followed a period of heavy labour and tedious waiting.

Sir Garnet's plan of campaign was divided into stages :—

- (i) The seizure of the Canal.
- (ii) The deception of Arabi, as to the real objective, until Ismailia was secure.
- (iii) The occupation of Ismailia, and the move of the expeditionary force to that place as circumstances permitted.
- (iv) The seizure and security of the railway and sweet-water canal to within striking distance of Tel-el-Kebir.
- (v) The clearing of obstacles from these lines of communication and the provision of boats and trains to make them efficient.
- (vi) The accumulation of sufficient stores at the advanced base, for a rapid forward movement.
- (vii) When all was ready the decisive battle.
- (viii) The pursuit which was to extend the effect of the victory to all portions of Arabi's army, and finish the campaign at one blow.

The first four stages had been successfully accomplished, and all energies were now devoted to rendering the railway and canal to Kassassin efficient, and to the collection there of supplies.

Obviously the more mouths to be fed at the front, the slower would be the accumulation of supplies for the forward move.

General Graham's Brigade and the British Cavalry Brigade therefore remained alone at Kassassin and Mahsama, supported by the Guards Brigade at Tel-el-Maskhula, while the remainder of the 1st Division and the Indian contingent stayed at Ismailia.

The 2nd Division at Alexandria had meanwhile been engaged in making that place secure, and by the 28th was ready to embark for Ismailia, which it reached on September 1, Sir E. Wood's Brigade and a Naval contingent remaining to garrison Alexandria.

As soon as the whole of the Indian Cavalry Brigade had reached Ismailia, August 28, a Cavalry Division was formed as follows :—

Commanding . Maj.-Gen. D. C. Drury-Lowe, C.B.

A.A.G. . . . Lt.-Col. Herbert Stewart.

1st Brigade. Commanding . . . Brig.-Gen. Sir Baker-Russell,
K.C.M.G., C.B.

3 Squadrons Household Cavalry.

4th Dragoon Guards.

7th Dragoon Guards.

2nd Brigade. Commanding. . Brig.-Gen. H. C. Wilkinson,
(late 16th Lancers).

2nd Bengal Cavalry.

6th Bengal Cavalry.

13th Bengal Lancers.

Divisional Troops.

N.A. R.H.A.

Mounted Infantry.

Veterinary. Postal. Commissariat, &c.

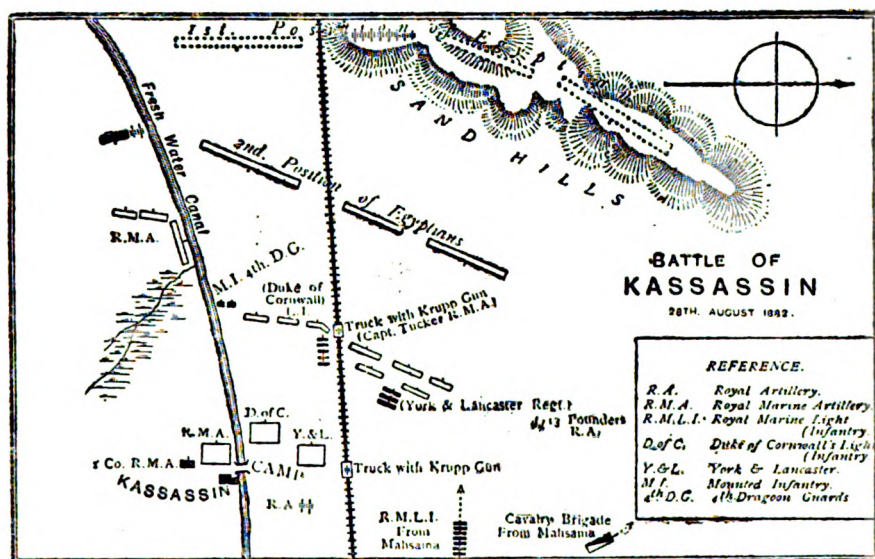
On this same day, 28th, was fought the first action of Kassassin, known by the incident of the moonlight charge of the Household Cavalry.

At 9.30 A.M. Egyptian Cavalry were reported on the hills North of Kassassin Lock. General Graham signalled to the British Cavalry at Mahsama for support, and turning out, Sir Baker Russell's Brigade remained in readiness till 4.30 P.M., when the enemy being reported as retiring, it withdrew again to camp.

However, it appears that, so far from retiring, the Egyptians began to press their attack on Kassassin, advancing at 4.30 P.M. a line of skirmishers supported by heavy artillery fire.

In General Graham's dispositions the nature of the ground forced him to refuse his right, and the left flank of the Egyptian attack on this side would therefore be exposed to the Cavalry advancing from Mahsama.

A heliograph message again called out the British Cavalry Brigade, and at 5.20 P.M. General Graham's A.D.C.—Lt. Pirie, 4th Dragoon Guards—was sent with a *verbal* message to General Drury-Lowe :—‘Take the Cavalry round by our right, under cover of the hill, and attack the left flank of the enemy’s skirmishers.’ Having returned to camp late after an exhausting day in the hot sun, General Drury-Lowe deemed it inadvisable to hurry his horses out again unless serious danger threatened, and did not therefore at once move up towards Kassassin.



Lt. Pirie therefore failed to find him where he expected, galloped his horse looking for him till it dropped from fatigue, then, coming across a Battery withdrawing to Mahsama to replenish its ammunition, obtained from it a fresh horse, and finally, after the sun had set, reached General Lowe, with the Household Cavalry, 7th D.G. and a battery R.H.A. at a point four miles N.E. of Kassassin.

The message he then gave him was to the effect that General Graham ‘was only just able to hold his own, and wished General Drury-Lowe to attack the left of the enemy’s infantry skirmishers.’

A bright moon was shining, and the flashes from the hostile artillery and infantry showed the direction, though the desert haze made the whole outline indistinct.

Leading the Cavalry round in a wide sweep, General Lowe arrived unperceived close to the part of the enemy's line which was posted on the high ground above Kassassin Lock, and about 3000 yards from it (fig. 1).

The 7th Dragoon Guards were in the first line, with the guns following them, and the Household Cavalry echeloned on the right rear.

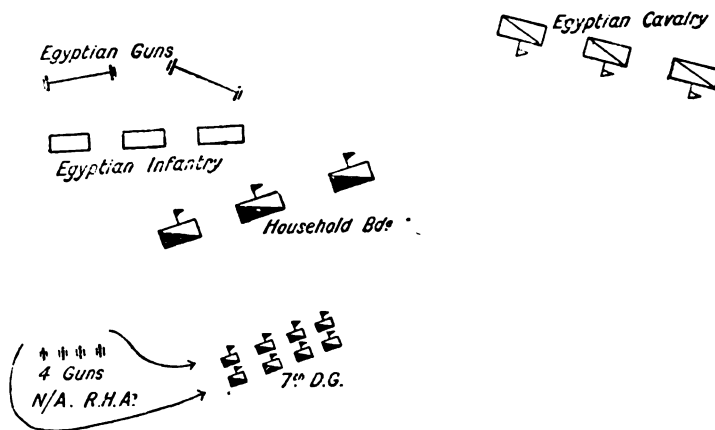


FIG. 1.

In this formation the little force came under combined artillery and rifle fire.

Ordered to clear the front of the guns, the 7th Dragoon Guards wheeled outwards by troops to both flanks, and reformed in rear of the guns and the Household Cavalry.

The guns opened fire, and the Household Cavalry charging struck the Egyptian Infantry and rode over them, the 7th Dragoon Guards following in hand in support.

In the darkness and confusion the Egyptian guns and Cavalry appear to have withdrawn unmolested.

The Household Cavalry reformed on the ground over which they had passed, and at 8.45 P.M. a general return to camp was ordered.

The Cavalry on this day lost 9 officers and men killed and 18 wounded.

In connection with this incident, it is useful to read carefully Section 159 of Cavalry Training, wherein stress is laid upon :—

(a) The selection of a position of readiness for the Cavalry forward and to the flank of the main line of battle.

(b) The position of the Cavalry Commander, and the necessity of close and rapid communication between him and the Commander of the whole force, which alone can ensure that the opportunity for action will be seized.

(c) The despatch of special officers' patrols to ensure that the Cavalry Commander is kept informed of all that is going on in his sphere of action.

It is further interesting to note the entirely wrong impression of the situation conveyed to General Drury-Lowe by General Graham's *verbal* message, which could easily, and certainly ought to, have been *written*.

During the twelve days which followed the first action of Kassassin there is little of interest to record, but all the time stores continued to flow to the front, and on September 8 final orders were issued for the concentration of the whole force at Kassassin to be completed by September 12.

Sir Garnet's Headquarters were timed to move to Kassassin on September 9, and leaving Ismailia at 9.15 A.M., he arrived there at 11 A.M., to find the second action of Kassassin had been fought and won, and that the 1st Division had pushed the Egyptians back to within 5000 yards of their works at Tel-el-Kebir.

Reports from the Indian Cavalry outposts had reached General Graham at 6.15 A.M. that the enemy was advancing in strength, and by 7 A.M. the whole British Force, Cavalry, Guns, and Infantry, now totalling some 9000 men, was turned out to oppose them ; and driving them back, by 10.30 A.M. had reached to within 5000 yards of the Tel-el-Kebir entrenchments.

Here the advance was stopped and by 1.30 P.M. the whole force was back in camp.

A close pursuit upon the heels of the retreating Egyptians would probably have enabled General Willis to occupy the works of Tel-el-Kebir that day, but such a partial success was not in accordance with Sir Garnet's plan; his preparation for the immediate forward movement of the whole army and for the Cavalry pursuit and occupation of Cairo were not yet complete, and when he did strike he meant the blow to be decisive and far-reaching.

Early on the mornings of the 10th and 11th, Sir Garnet and his Staff carried out a close personal reconnaissance of the Egyptian position, which was visible from the outpost line of the Indian Cavalry Brigade before Kassassin, and on the morning of the 12th he personally explained to Generals commanding Divisions and Brigades, from the high ground whence the works were visible, his plan of attack as follows :—

1st. The Egyptians must not merely be manœuvred out of their position, but crushed, broken, and dispersed by actual fighting.

2nd. The fighting must take place as early in the morning as possible, to give time for the pursuit by the Infantry to Zagazig, and by the Cavalry to Cairo.

3rd. Surprise was essential—the advance was to be made that night, i.e. after the arrival of the last battalion (timed to march in that day), but no sign of the intended movement was to be made till after dark.

The attacking force numbered 17,000 men, with 61 guns and 6 machine guns—of this total 2,800 of all ranks, with 12 guns, formed the Cavalry Division.

Marching so as to approach the Egyptian works before dawn, the two British Divisions were to deliver their attacks simultaneously; a wide interval was to separate the Divisions, so as to ensure that the failure of either should not affect the other, and in it were to be placed the massed guns of the Army Corps,

while on the right rear marched the Cavalry Division, ready to sweep round behind the works, dash in on the flanks of the retreat, and carry the pursuit on to the gates of Cairo.

The Indian Infantry Brigade was to move on the south side of the Canal, starting an hour after the remainder of the Army, so as not to alarm the villages upon their line of advance in time to give warning of the attack.

Thus placed, the Indian Brigade was ready to march direct on Zagazig after the action and secure that important junction.

The plan being thus explained personally to the Generals, the following orders were issued with sketch map attached.

‘ Head-quarters, Kassassin,

‘ September 12, 1882.

‘ 1. The Army Corps will be prepared to march this evening at 5 P.M.

‘ The men’s valises and blankets, and the officers’ light baggage, will be carried to the nearest point of the railway opposite the encampment of each corps and battalion, where they will be stacked alongside the line.

‘ At 6.15 P.M., but not before that hour, the tents will be struck, packed, and deposited alongside the valises.

‘ One non-commissioned officer and two men of each corps and battalion will remain with the tents and valises.

‘ After depositing the tents the men will not return to their camp, but will be formed up by brigades and marched to the ground where they will bivouac.

‘ After sunset no bugles will be sounded until after broad daylight to-morrow.

‘ The present camp will be left in charge of one troop 19th Hussars (to be detailed by the General Officer Commanding 2nd Division), the headquarters and remainder of the 1st West Kent Regiment, except fifty men, the 24th and 26th Companies Royal Engineers, and all details of corps troops.

‘ These troops will be under the command of Brigadier-General Nugent, C.R.E. ; their tents need not be struck this evening.

‘Each soldier will carry 100 rounds of ammunition, all that remains of to-day’s rations, and to-morrow’s full rations (excepting meat); water bottles will be filled with cold tea if practicable.

‘The regimental transport will be packed with cooking utensils, two full days’ rations, one day’s fuel, butchery, and signalling implements, and as many blankets and greatcoats as can be carried without overloading.

‘The transport will be brigaded at daylight and follow the army, keeping along the north side of the railway.

‘Water-carts and stretchers will accompany the battalions when they march out of camp this evening.

‘Thirty rounds of ammunition per man carried by the baggage animals will press on at daylight after being brigaded, and will not remain with the rest of the regimental transport.

‘The Mounted Infantry will carry seventy rounds per man, and must arrange for the carriage of another seventy rounds on pack animals.

‘The Naval Brigade, the Indian Contingent, the Cavalry, Artillery, and Engineers will conform to the above instructions so far as they are applicable and practicable.

‘The following alterations will be made to-morrow in the printed “redistribution” of troops :— *

‘(a) The Naval Brigade will be detached from the 1st Brigade and will keep with the 40-pr. gun.

‘(b) The 1st Royal West Kent Regiment will guard the camp, except fifty men, who will be the escort to the ammunition column. The officer commanding this party will report to and receive orders from Major Hebbert, F Battery 1st Brigade Royal Artillery, ammunition column.

‘(c) The Duke of Cornwall’s Light Infantry and the 3rd King’s Royal Rifle Corps will form the 4th Brigade, under Colonel Ashburnham, King’s Royal Rifle Corps, and will belong to the 2nd Division.

* I.e. that made on the transfer of Sir E. Hamley with Sir A. Alison’s brigade to Ismailia.

‘(d) A Battery 1st Brigade, D Battery 1st Brigade, I Battery 2nd Brigade, N Battery 2nd Brigade, H Battery 1st Brigade, C Battery 3rd Brigade, and J Battery 3rd Brigade, Royal Artillery will form an artillery brigade under the General Officer Commanding Royal Artillery.

‘(e) G Battery B Brigade and N Battery A Brigade, Royal Horse Artillery, will be attached to the Cavalry Division.

‘2. The positions which troops will take up for bivouacking have been pointed out to Generals Commanding.

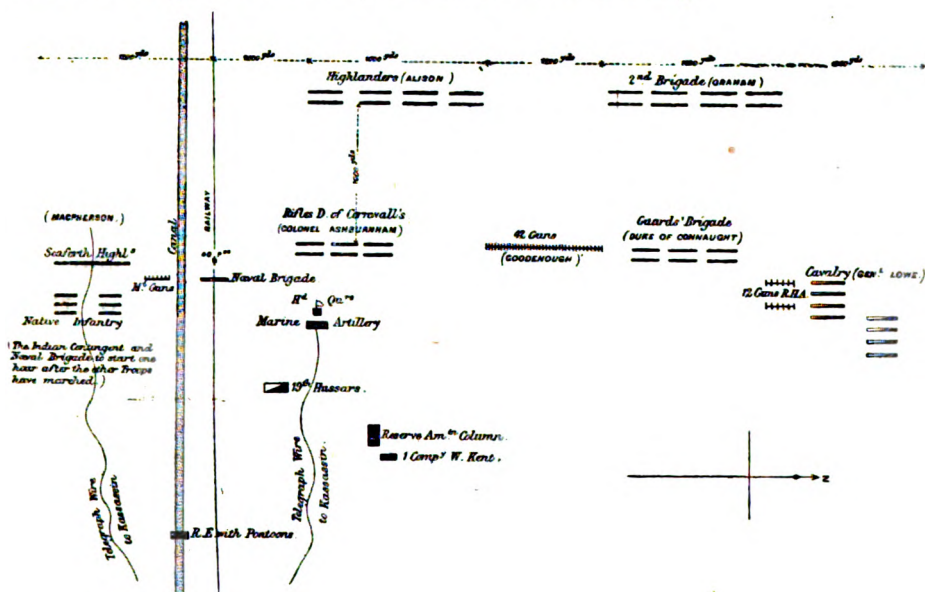


FIG. 2.

‘Distances will be taken from the 4th Brigade, and the *point d'appui* will be the left of the Duke of Cornwall's Light Infantry, which will rest on Ninth Hill, where the artillery picquet is now posted; this point is 2000 yards north of the railway.

‘3. The present outposts, excepting those at Ninth Hill, may be withdrawn, and from sunset this evening all orders and arrangements for the protection of the camp will be made under the direction of the General commanding the lines of communication.’

A rough plan of attack (fig. 2) was distributed to General Officers Commanding Divisions and Brigades.

By 11 P.M. the troops were in position, and at 1.30 A.M. the advance began.

The Cavalry Division, guided by Brig.-Gen. Wilkinson, had been directed not to leave camp till an hour after the Infantry; its first point, a flagstaff one mile north of its camp at Kassassin, was duly reached, and at 2.15 A.M. its advance began in a North-Westerly direction in Column of Troops, the Indian Cavalry leading, followed by the guns, and with the heavy Brigade in rear.

At 3.10 A.M. the Division halted and fronted towards the West.

The night was very dark and the march was carried out in silence so still, that at 100 yards distance there was no indication whatever that an army was on the move.

The 2nd Division, led by the Highland Brigade, appears to have moved faster than the 1st Division on its right, and at 4.50 A.M., just before the attack commenced, the front of the Army must have formed an irregular echelon, thus :—

Highlanders

Artillery

Graham's Brigade

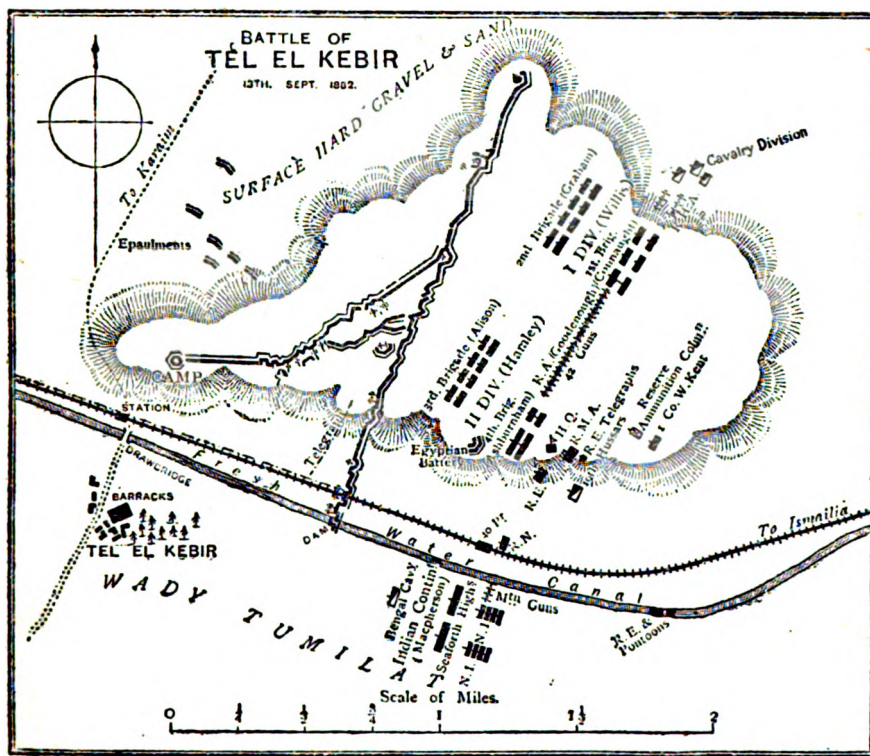
Cavalry Division

It was five minutes to five when it became evident that the Highlanders were nearing the parapet, the enemy's picquets were dimly seen and a few dropping shots were fired by the Egyptian sentries on the works.

Fixing bayonets as they moved, the Highland Brigade had advanced 200 yards before the whole line of the entrenchments was lit by flashes from Egyptian rifles at 150 yards range; with a ringing cheer the Brigade rushed to the assault, and by 5.20 A.M. was in possession of the outer line of works.

Meanwhile the leading Brigade of the 1st Division, starting to the assault some ten minutes later than the Highlanders, carried the works in their front with a rush.

At 4.40 A.M. the Cavalry had begun moving forward at a slow walk, and at five minutes to five, when the first shots were fired, were some 2000 yards from the works. Increasing the pace to a trot, the Division soon came under fire from the flank redoubt of the Egyptian line. The R.H.A. at once came into action against this work and a Battery of Field Artillery in the open beyond it, while the Cavalry swung round on to the left rear of the Egyptian line.



By 5.30 A.M. all resistance had ceased from opposite the right of the Highland attack northwards, and, assailed by the R.H.A. guns on their left, the field guns on their right, and the 1st Division in their front, and with the Cavalry Division in line of squadron columns bearing down on their left rear, the masses of the Egyptian reserves, which were forming in rear of their works,

broke and fled, a confused mob, throwing down their arms as the Cavalry passed through them to the bridge of Tel-el-Kebir.

Opposite the Highland Brigade the resistance had been more stubborn, and it was 6 A.M. before the capture of the inner works was complete.

It is to the defeat of his left, and to the descent upon his rear of the Cavalry and R.H.A. that drove his left in flight upon his centre and right, that Arabi himself attributed his disaster.

By 6 A.M. the Indian Cavalry Brigade was in possession of the railway station at Tel-el-Kebir, and the escaping trains, of which two had already got away, were stopped.

Shortly afterwards Sir Garnet, with the advanced portion of the Highlanders, reached the bridge at Tel-el-Kebir and orders were issued for the pursuit, *i.e.* for the Cavalry to push on at once to Cairo, and the Indian Contingent to Zagazig, thus breaking connection between the different detachments of Egyptian troops distributed throughout the Delta.

Brig.-General Wilkinson, with the Indian Cavalry Brigade and Mounted Infantry, marched by the north side of the canal to Aabasa, where he crossed the Wady Canal and, moving along the western bank of the fresh-water canal, reached Belbeis by noon, opening the lock sluices as he passed to let down fresh water to the troops at Tel-el-Kebir.

At the telegraph office messages from Arabi, at Inshas, to his commanders were intercepted, ordering a general concentration of troops by Tanta and Benha on Cairo, and thus the rapid pursuit had already dislocated the attempt of the Egyptian commander to gather fresh forces.

By 5 P.M. General Drury-Lowe and Sir Baker Russell reached Belbeis by the eastern bank of the canal with the 4th Dragoon Guards, the remainder of the Heavy Brigade and the guns being delayed by heavy sand and the difficulty of crossing the small canals met with on their route.

During the night, General Lowe moved on again with the 2nd Bengal Cavalry, the 6th Bengal Cavalry, the 4th Dragoon

Guards and part of the 17th Bengal Lancers, reaching Cairo on the afternoon of September 14.

In order that the Egyptians should be kept in ignorance of the small numbers of the British Force, General Lowe halted his troops in the desert out of sight of Abbassiyeh, and sent on Colonel Herbert Stewart with a guard of fifty men of the 4th Dragoon Guards and Indian Cavalry.

Entering Abbassiyeh, Colonel Stewart sent for the Officer Commanding, and received his promise to surrender the barracks and assist in every way.

The Governor of Cairo, the Prefect of Police, and the Commander of the Citadel next arrived, and it was agreed that Arabi should be given up, and the Citadel surrendered that night, while the British troops were not to enter the city that evening lest a disturbance should be caused.

At 8 P.M. a party of 150 men (4th Dragoon Guards and M.I.) took over the Citadel, the garrison marching out to the Kasr-en-Nil Barracks, where they laid down their arms.

At 10.40 P.M. Arabi and Toulba Pasha gave up their swords at Abbassiyeh, and during the night 10,000 men of all arms laid down their weapons and dispersed to their homes.

Brig.-General Wilkinson, who on General Lowe's departure had been left at Belbeis with two squadrons in order to open communication with Zagazig, failed to effect that purpose, and following to Cairo along the canal, opening the sluices as he went, entered the city during the night, and by 7 A.M. on September 15 was in possession of the telegraph office and railway station.

Zagazig was occupied by the Indian Contingent at 4 P.M. on September 14; railway communication was opened with Cairo, and on September 15, at 9.45 A.M., Sir Garnet Wolseley and H.R.H. the Duke of Connaught reached the capital.

It remained only to secure the surrender of the various Egyptian detachments and to change the base from Ismailia to Alexandria, which was accomplished without difficulty.

The war was over.

On July 30, the first transport had sailed from England.

On August 15, Sir Garnet landed at Alexandria.

On August 20, the Suez Canal was seized.

On September 13, the Egyptian Army was defeated and dispersed at Tel-el-Kebir.

On September 14, Cairo Citadel was occupied and Arabi surrendered to the Officer Commanding the Cavalry Division.

On September 30, a grand parade of the British Force took place before the Khedive, whom it had reinstated, and on October 5, Sir Garnet attended the ceremony of the Sacred Carpet at the head of his troops.

A force of 10,000 men remained in Egypt and the remainder of the troops then returned to England and India.

Thus ended a campaign remarkable from the first for its correct strategical conception, for the thoroughness with which the original plan was prepared and carried out, and for the attention to every detail which secured its success, and above all interesting to Cavalry soldiers as an example of the correct and successful strategical employment of his Cavalry Division by the General in Chief Command.

MULE BREEDING

By HAROLD SESSIONS

It may seem somewhat pedantic in writing about present-day mule breeding to discuss the efforts and results of ancient mule breeders, but a brief consideration of their work may guide us to the correct solution of some of the present-day problems.

Central Asia must be regarded as the place where mule breeding was first extensively practised, and doubtless the first mules and jennets which were bred were 'accidents,' due, perhaps, to the proximity of donkeys and horses waiting together at some of the gates of those ancient cities whose ruins have recently been re-discovered by Dr. Sven Hedin. Similar promiscuous gatherings of horses and donkeys are to be seen waiting outside the city walls of some of the towns in Africa at the present day. The special attributes which some of these 'accidental' animals possessed would be observed and appreciated by the people of Central Asia. From there mule breeding seems to have spread to North-East Africa and then along both sides of the Mediterranean Sea, and during the past five or six centuries has been extensively resorted to in Italy, France, Spain, and Portugal. From these latter countries we are able to trace mule breeding to North America, where it has assumed enormous proportions; to South America, where it is still in its infancy; while South Africa and Australia have only just commenced breeding on any scale.

In the accounts which we possess of the large number of mules which are enumerated as belonging to some of the ancient kingdoms at the time of, or before, the Babylonian Empire,

we must make some allowance for jennets. The term 'mule' in those days probably meant an animal which was bred half-horse, half-donkey, irrespective of which was the sire. To-day we make a distinction. A mule is an animal that has a jackass for a sire and a horse mare for a mother, while a jennet has a horse stallion as a sire, and a donkey mare, or jinny, for a mother. It is a remarkable fact that from the earliest time that we have any reliable records to examine, jennet breeding has not been adopted by any country. In all mule-breeding countries we observe a few jennets, some very excellent, the majority inferior. In many districts where donkeys are numerous it must be cheaper and easier to breed jennets rather than mules, because the donkey mares can live on a smaller quantity of food and drink less water than horse mares. This consensus of opinion from ancient times to the present, and from every continent in the world, demonstrates that practical men invariably formed the opinion that the mule is a superior animal for its work to the jennet. It is a time-honoured axiom to say that the mule combines the better qualities of both its parents, whilst the jennet exhibits the bad ones.

In England mule breeding was carried on to a certain extent during the period when the Cistercian monasteries flourished, but during recent years very few mules have been bred. There is practically no demand for mules in England to-day—good roads, motors, railways, and horses having superseded them. In Ireland mules are bred to a limited extent. In other parts of the world mule breeding has, during recent years, been very largely on the increase. The South African War cleared off the surplus mules of the world, and prices during the succeeding years were higher than they had ever been. I noticed this particularly in Spain. During the war mule owners in that country got what they considered a good price for their mules, and they were somewhat surprised to find in the following years when they wanted to buy mules for themselves for their own work that a scarcity had been created, and they

had to pay a much closer price to what they had sold their own mules for than they had anticipated. The same thing I found had also occurred in the United States, and what are known as 'cotton mules' were scarce and dear.

I have elsewhere referred to what I call a 'mule line,' dividing the horse-breeding and mule-breeding latitudes. This line we find extending on both sides of the equator, and it is fairly constant on each continent. It includes the warm, dry regions of the world. It extends north of the equator in Africa and Europe to the forty-fifth degree of latitude; in Asia and North America as far as the thirty-fifth degree; and on the south side of the equator it includes Africa, the larger part of Australia, and South America as far south as the thirty-fifth degree. In these vast regions hundreds of thousands of mules are bred, and it is here where they thrive best and give the best results. In the colder and more temperate region horses are more economical to work, being faster, more powerful, and generous, and they give their best results where they can get plenty of food and water. There are within the mule line valuable breeds of horses, such as the Arab, Barb, and Texan, but this does not alter the general consideration. There are a great variety of mules being bred to-day. Some of them are big, heavy animals with great power and bone, standing seventeen hands high. These animals carry a considerable amount of flesh, and they are worth anything up to £80 each. From these we may work down through successive stages until we come to the smaller eleven-hand mule, to whose breeding very little attention has been paid. One point I should like to emphasise is that a mule should not be judged by the same standard as a horse; their virtues lie in different directions. A mule in a hot, dusty country will live and work, day after day, with very little water, and he will eat and digest hard, fibrous food which a horse would find extremely difficult to exist on. But the mule that will go without water and live on this food is not an animal with a big body containing a lot of succulence, but he is a spare,

narrow animal with great depth of chest, rather than width, with great length from the quarters to the hock, a somewhat hard skin, and is often rather thriftless in appearance. That is the animal that will do the most satisfactory work on the smallest amount of food and water. Where you get better food and more water it is right to breed a mule with a larger 'barrel,' and carrying more flesh, but where this feature is developed to a great extent an animal is produced so nearly like a horse and whose wants approximate so closely to those of a horse that there is little advantage in the animal being a mule.

There are three principal factors which materially influence the types of mules which are bred. These factors are climate, food, and parentage. The first of these—climate—is a more or less fixed though erratic quantity, and we have to suit our methods to the climate in which the mules are being bred.

The second factor—food—is to a greater extent under our control, and it is acknowledged that mules which are fed well during their younger days will grow more rapidly and make much larger and better-looking animals than those whose food has been scanty. In many countries there are dealers who buy eight and ten-month-old mules and put them in paddocks or barns, and feed them up until as two and a-half and three-year-olds they sell them to go into work. For economical mule breeding we have to use the food which is found native to the country. There are many districts which will grow good strong mules of medium size and weight, while to attempt to grow heavier mules in the same districts would only result in failure; which, indeed, in some respects is fortunate, for if such mules were bred, the districts in which they would have to perform their daily work would fail to supply them either with the quality or quantity of food necessary to keep them in good working condition—to do justice to their abilities. In towns and cities, however hot and sterile the country districts may be, food can be purchased suitable for big-bodied and strong mules. In the army, also, during peace time food is plentiful, but during a campaign, when

plans are constantly changed and convoys captured, the resources of the countries where the mules are being used have frequently to be solely relied upon to provide forage. It is then seen that the animals which have been bred to hardihood with strong digestions, which can work day by day while carrying little flesh, and whose need for food and water is moderate, are the more useful animals. Those are the critical moments when this class of mule shows to the greatest advantage. The same consideration applies where mules are used for commercial purposes in the country districts of such regions as I have mentioned.

In purchasing mules we all prefer the animal which is good-looking, symmetrical, the best-bodied, and the fattest and sleekiest, and we are apt to conclude that such animals are the best adapted to work. Certain it is that if you are buying for any public service, such as the Army, or Government, or Corporation Departments, such animals are the only ones which will give satisfaction, because they pass through so many hands and have to be reported upon by so many authorities whose dicta sometimes carry more weight than knowledge. The same applies to commercial life, and if you risk your own money in buying mules you know that in order to get it back by selling them they must be in good condition, well made, and attractive to the eye, otherwise buyers will not purchase freely. There is no doubt that, owing to these causes, breeders and buyers have to study appearances to too great an extent, and there is a tendency to-day to forget that the greater part of a mule's value as distinct from a horse is its ability to thrive and work under conditions which are detrimental to a horse. If anyone doubts this, he has only to purchase two lots of mules for some public body and hear the results. His first lot of mules should come from regular work in a mountainous district where day by day, in heat and dust, over rocky tracts they have jolted and scrambled, urged to their utmost by drivers as rugged as the roads, fed on chopped straw, a little barley, and watered at long intervals. They would look thin and gaunt, with long, sloping quarters, the

hocks away behind their tails, with flat, narrow, deep ribs and tough skin, though every muscle would be hard and tough like wire. The other lot should be purchased from the more generous lowlands, their conformation approaching that of a horse. They would have well-sprung ribs, good quarters, be well fleshed, and have smooth, kindly skins. Send these two lots of animals to a distant country, and read the confidential reports from those whose hands they pass through. First there would be a report of the voyage; a second at the port where they disembarked; a third on their arrival at the depot; a fourth on inspection by a superior authority; a fifth by the authority who has to select them or to whom they are issued for work. One and all would say that the lowland mules were good, and the others were bad and useless, and they would unanimously agree that whoever purchased the mountain mules should never have an opportunity to repeat his glaring error. To a great extent these critics would be right. They judge the animals by their appearance, and had the mountain mules come from the same environment as the others, their lack of symmetry, their gauntness, and their indisposition to carry flesh would mean that they were the inferior class of the district. If, on the other hand, they were the picked lot of the best of the mountain district then such criticisms are wrong, and it is only by the severer test of work that a correct opinion can be formed, or by an intimate knowledge of what the various classes of mules are doing under normal conditions in the districts in which they are bred. Owing to these various circumstances those who control the money for the purchase of mules are almost bound to favour a type of animal which in appearance approximates to a horse. The breeders recognise this and are now engaged in breeding such animals rather than in paying sufficient attention to breeding tough, hardy animals suitable for hot and sterile countries. We should therefore try to select such parents as will thrive on the natural food of the country in which the mules are being bred, and where they are likely to be required for service purposes guard against

a very natural tendency to produce what is pleasing to the eye at the expense of the power to work under difficulties.

The third factor—parentage. Taking the mother first, she has in nearly all mule-breeding countries in the first instance been a mare which is native to the district, but now in places where it has been observed that big-bodied mules are the ones which sell best and fetch the most money she has in many instances been greatly improved. The more enterprising breeders start to grade up their horse stock preliminary to the breeding of mules. In some districts this is done by using stallions of the local breeds or of some breed closely allied. In others, it is by the importation of stallions of a different type altogether to those native to the country, and in some cases by the importation of both mares and stallions. In many ways the mule shows the qualities of its mother in its temperament and in the conformation of its body: while in its neck, head, and limbs it takes closely after its father. For this reason where big cart mules are required stallions of the Percheron and Suffolk Punch breeds are used to grade up native races of mares. In hot, dry countries such sires are rarely used, but on rich lands, such as the valleys of the Mississippi and Missouri rivers and in many parts of Brazil and the Argentine, and in Northern France, the use of these stallions has given very paying results. In Spain, Italy, South and North Africa, and I should imagine in Asia and Australia (but of these two continents I cannot write from personal knowledge), the plan usually adopted of using stallions of the country or of a breed similar to them gives the best results.

The selection of the sire must depend on under which of the foregoing conditions he can be used—conditions of climate, food, and the type of mare he is to be crossed with. The best breeds of donkey in the world for mule breeding are the Spanish, French, and North American. Of these the North American has been bred from Spanish and French, and I am inclined to believe that, although the French claim theirs is a distinct breed, it undoubtedly was derived from Spanish sources. There

are many other breeds which are used as mule sires, such as the Asiatic and Egyptian jacks, and in their proper places they are excellent; but my experience teaches me from my knowledge of the mule breeders that they prefer the three breeds which I first mentioned. For some years past I have seen most of the best jacks bred in Europe, and know where they have been exported to. A large number I have owned, and I have sent them to breeders on every continent in the world. From this cause, and knowing the byeways of Western Europe pretty thoroughly, I can appreciate the class of jack which gives the best results and which mule breeders like to have. The best French jack is the Poitou. He is bred in the North of France by a few farmers and in very limited numbers. He is an animal standing from 13.2 to 14.3 hands high, and sometimes reaches 15 hands in height. He has a very long, shaggy coat of hair, which makes him look larger than he really is. He has a good head and ears and good feet, but the latter in many cases turn out too much. He has the most ferocious temper of any jack I know, and care has to be taken to avoid being 'savaged' by him. Besides being used for mule breeding in France, he has been used a good deal in North America, crossed with the Catalan, and so has helped in the foundation of the American jackass. A few have also been exported to the Argentine and Brazil, where they are now being bred. He is a somewhat costly jack, fetching from £250 to £300, and exceptionally £500.

The Spanish jack, for the purposes of this short paper, I would divide into three groups. The Catalan—which is bred in the Pyrenees—is a black jack with a mealy muzzle and underline, varying very much in height from 12 to 16 hands, and I have measured some over 17 hands. They vary greatly in conformation, although all of one type. They have been in-bred for generations and they possess great prepotency when crossed out. The best are usually jacks which stand from 14.2 to 14.3 hands high, and I think they produce bigger and stronger mules than the 16-hand jack.

In Southern Spain there are a large number of grey donkeys. Some of these are very well-made animals. They are not so reliable for serving mares as the Poitou or Catalan, being more lethargic in disposition. Mule breeders do not like them for this reason, and also because when they are crossed with brown or bay mares they throw weak-coloured foals.

The jacks of the Mediterranean islands, taken as a whole, I should classify as Spanish jacks. In colour they resemble Catalans, in shape and size they are nearer the type of the grey jacks. They have during the last few years been extensively purchased and there are very few of the best families left in any of the Mediterranean islands.

The Italian donkey is smaller than the Spanish, and though used largely for mule breeding in Italy, does not when sent to other countries meet with the same favour as the French or Spanish.

The American jack has been bred to a state of great perfection. More pains have been taken in the United States than in Europe to keep a first-class animal, and there are now a great number of very fine donkey studs in the United States, while in Europe the donkeys are bred singly or in twos or threes by the peasant farmers. There is one characteristic in a jackass which has to be carefully kept in mind, and that is his willingness to serve a horse mare. Large numbers of jacks will not do this. Under the most favourable conditions you do not get as large a percentage of foals in mule breeding as you do in horse breeding. Added to this, jacks are very shy servers, and very small things, such as a change of attendant, change of food, change of climate, will upset them for considerable periods, and they will refuse to serve. One experienced mule breeder in writing to me says: 'I never allow an imported jack to be tried for service until he has been twelve months in the country and is acclimatised.' Of all the jacks, the Catalan is probably the most reliable in this respect, and the Americans have very wisely kept importing some Catalans year by year to keep this virility in their breed.

Taking the different continents into consideration as to their mule resources, we should find that North America could supply the largest number. In Kentucky, Kansas, and Missouri we find the biggest type of mule that is bred, some of them ranging from sixteen up to seventeen hands in height. Farther south, and working down to Texas, the mules become smaller, ranging down to about twelve hands in height. Amongst them are a large number of well-made, strong mules, and a great number of almost any height can be purchased suitable for military purposes. In Europe the chief supply of mules would be in France, Spain, and Italy. There is not the superabundance of mules in Europe that there is in North America, and considerable and persistent buying would very quickly affect prices. The mules would probably be as good workers as any to be found elsewhere, but on the average in make and shape the North American mule is best. In Spain the mules are better workers than they look, and are very suitable for working in dry, sterile countries. In South America there is a supply of mules in the Argentine. They have not the size or substance of either the North American or the European mule. This is largely owing to the class of mare they have been bred from as well as being sired by an inferior class of jack. The country is quite good enough to breed mules equal to any in North America. Brazil and Chili at the present moment both import mules. During the last few years all these South American countries have been paying much more attention to mule breeding and have imported a number of jacks as well as stallions to grade up their mares, and during the next ten or twenty years there should be a very marked improvement in the quality and number of the mules that are bred. In Asia—my information comes from those who are, or have been, mule breeding out there—I understand there is no large surplus of mules available or suitable for military purposes. During the last few years donkeys have been imported into India in considerable numbers, both from the United States and Europe, for the purposes of mule breeding. The result of these im-

portations will doubtless be to improve the race of donkeys already existing there and to create a larger supply than exists at present. South Africa, which seems to me to be a country peculiarly adapted both for mule breeding and to the use of mules, has made very little progress in this matter. Recently the subject has received more attention, and in each of the Colonies, with the exception of one, donkeys of very superior merit have been imported; and the Transvaal has also very wisely started to breed its own donkeys by starting a stud of the best European mares. In Rhodesia the authorities have for local reasons been advised to start jennet breeding, but I cannot think this, in the face of such universal objection, can be wise except as a very transitory experiment. Australia—another country pre-eminently suited for mule breeding and where in the future large numbers of mules are certain to be required—only breeds them to a very limited extent; but in several of the Colonies both jacks and mares have been imported during the last few years, and I have very little doubt but that the numbers will considerably increase.

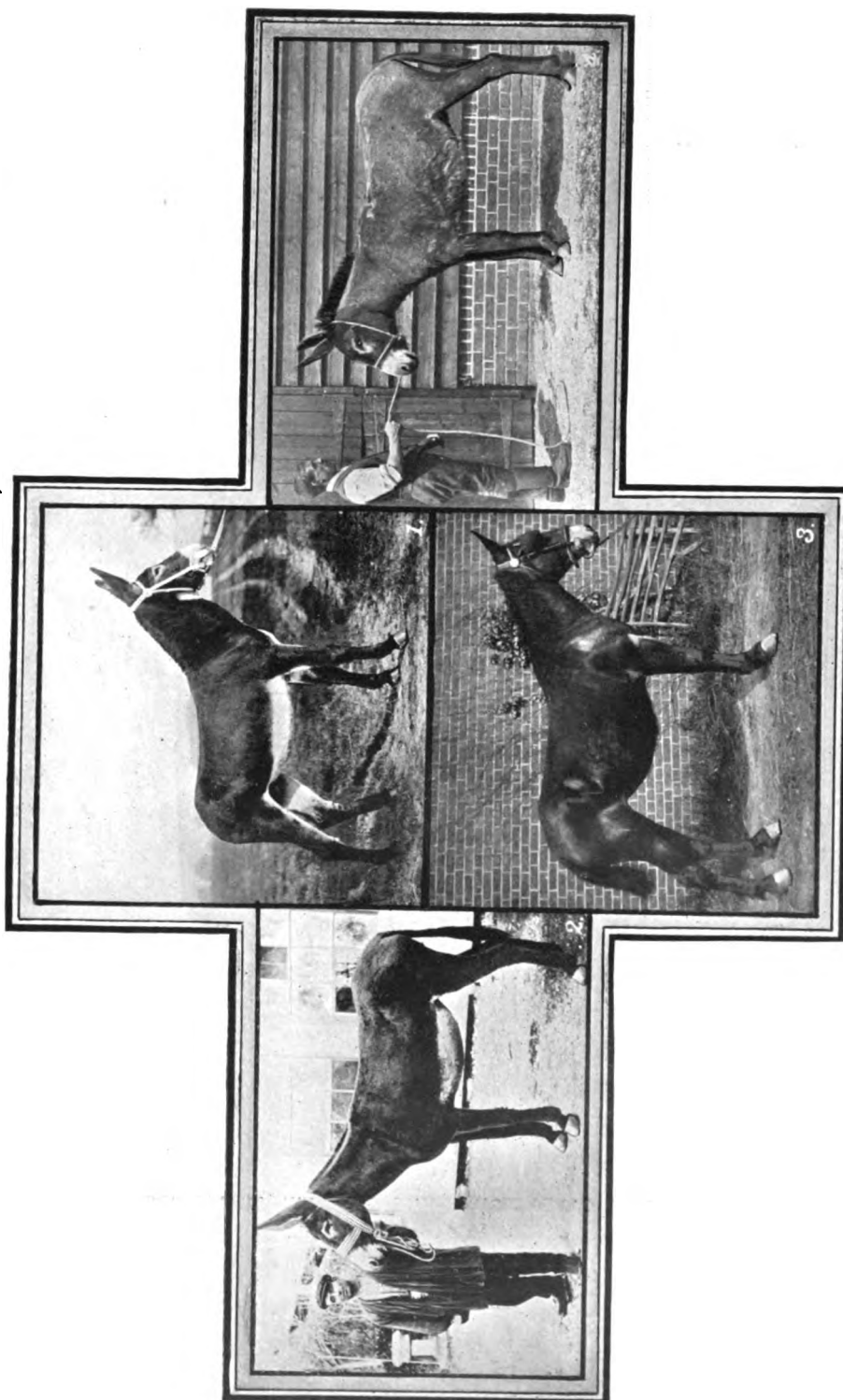
In the British Empire, apart from India, the two places where mules might be bred to a great extent, and where they would be beneficial to local industries, and where supplies might be looked for in the event of war, are South Africa and Australia. At present both these countries wish to import mules for their own needs. One has done so and the other is arranging to, but if the industry was encouraged they might both have a large surplus for use if required in emergency. A subject which might well receive consideration is the extent to which mule breeding should be encouraged in Australia or South Africa, so that animals might be drawn from there in time of war. In a letter which I received a few days ago from Australia my correspondent says, 'We have on one of our stations about 160 mules of various breeds and sizes. I have ridden and driven nearly all of these and they are a success in our dry, saltbush country. We find that in drought time the

mules do well on saltbush, mulga, and other edible shrubs damped and then sprinkled with a little pollard, and when they are fed on pollard and chaff they eat much less than horses do and do far more work. There is one thing I am certain of, and that is that mules are bound to come into more use year by year as their good qualities become better known. Mules are going practically year in year out, whereas horses want a spell every few months, as they get leg-weary on good feed, and when feed is scarce they soon get poor.' Although in England I do not consider there is much advantage in using mules instead of horses, yet for some purposes they are very useful, and for such work as going to and from a farm some four or five miles distant twice a day during summer and winter, a mule stands the continuous hammering much better than a horse, and we use and breed them for this purpose.

The illustrations are of animals which I have bred or owned, or which I own at the present time.

NOTES ON ILLUSTRATIONS.

1. Black Catalan Jack. Age 30 months. Height 14-2.
2. Catalan Donkey Mare, from which the best style of Jacks are bred.
3. Mule. Bred by Lord Moreton from an English cast mare, and now at daily work on a farm. Age 4 years. Height 16-1. Weight 1176 lbs.
4. Balaam. A first cross between a Catalan Jack and English Jinney. Now in Lord Arthur Cecil's stud in the New Forest. Age 5 years. Height 12-2.



MULE BREEDING.



**WILLIAM CAVENDISH, DUKE OF NEWCASTLE, K.G.
1592-1676.**

(Author of a renowned work on equitation.)

*WILLIAM CAVENDISH,
DUKE OF NEWCASTLE, K.G.*

BORN in the year 1592, the son of Sir Charles Cavendish, and subsequently educated at St. John's College, Cambridge, William Cavendish, as a result of a visit of King James to Welbeck in 1619, was created Viscount Mansfield on November 3, 1620, and a few years later was promoted to the dignity of an earldom under the title of the Earl of Newcastle. His name appears in 1642 in a 'List of the Earles that have absented themselves from the Parliament, and are now with His Majestie,' and in this same list he is described as 'Lord Generall of His Majesties Foot Forces.'

In 1638 he was appointed by the King governor of the Prince of Wales, and under his care the Prince became an accomplished horseman, and when writing of him in later years the Earl states: 'Our Gracious and Most Excellent King is not only the handsomest and most comely horseman in the world but as knowing and understanding in the art as any man.'

At the end of November 1642, having previously been sent to secure Newcastle-on-Tyne and take the command of the four northern counties, the Earl of Newcastle entered Yorkshire, defeating Hotham at Piercebridge, and, having successfully raised the blockade of York, met Fairfax at Tadcaster in an indecisive battle. By the middle of the following year he had through his strenuous efforts subjected the whole of Yorkshire, with the exception of Wressel Castle and Hull, to the King's authority. At the battle of Marston Moor, Newcastle, who had hurried back from the north, where he had been engaged with

the Scots, was present as a volunteer, but held no direct command. More than once about this time he had contemplated laying down his commission and proceeding abroad. 'If you leave my service,' wrote the King, 'I am sure all the north is lost. Remember, all courage is not in fighting: constancy in a good cause being the chief, and the despising of slanderous tongues and pens being not the least ingredient.'

However, Newcastle did proceed abroad, sailing from Scarborough and arriving at Hamburg on July 8, 1644. Afterwards he resided in turn at Paris, Rotterdam, and Antwerp. In the last-named place he published in 1658 the first of his two great works on equitation, it being entitled '*La méthode et invention nouvelle de dresser les chevaux.*' At the time of the publication of the work he was in great financial difficulties, but nevertheless possessed a stable of eight horses, and his riding-house was the admiration of all who visited the place. The title of the work is perhaps misleading, for embodied in the book are copious observations on the art and theory of horsemanship. In fact the translation of it, published in London in 1743, describes it as '*The manner of Feeding, Dressing, and Training of Horses for the Great Saddle, and Fitting them for the service of the Field in time of War, or for the Exercise and Improvement of Gentlemen in the Academy at home, a science peculiarly necessary throughout all Europe, and which has hitherto been so much neglected or discouraged in England that young Gentlemen have been obliged to have recourse to foreign nations for this part of their education.*'

The translation of 1743 is dedicated to the Duke of Richmond, as Master of the Horse. It is divided into four books, the first of which deals mainly with the matter of the care of horses, the breaking of colts, and the general question of breeding. The second is devoted to equitation, the third to teaching 'how to dress a horse in all sorts of airs by a new method,' while the fourth enumerates all the vices of the animal and the 'surest ways to cure them.' The illustrations by Diepenbeke contained

in the book are most exquisite works of art, and the cost of the whole compilation was a very considerable amount. In addition to this one, translations were also made at Paris and Nuremberg.

It was not until 1667 that Newcastle, having been granted a dukedom in 1664, published his second book, 'A new method and extraordinary invention to dress horses and work them according to nature by the subtlety of art.' In the preface it is explained that the work is 'neither a translation of the first, nor an absolutely necessary addition to it,' but one which 'may be of use by itself without the other, as the other without this, but both together will, questionless, do best.' It was further published in London in 1677, in Dublin in 1740, and translated into French in 1671.

B. E. SARGEANT.

MOTOR CARS WITH THE CAVALRY DIVISION

By LIEUT.-COLONEL M. J. MAYHEW, *Administering the Army Motor Reserve*, and MAJOR G. SKEFFINGTON SMYTH, D.S.O., *late 9th Lancers, Permanent Staff Officer, Army Motor Reserve*

ANYTHING in the nature of a criticism of the use of motor cars in future warfare must inevitably be of a theoretical description and of a prophetic nature, for, owing to the nature of the countries in which the last two big wars have taken place, motor cars were unable to be put to much practical use or to be employed to any large extent.

The establishment of motor cars attached to the Cavalry Division, as at present laid down, is fifteen cars. These are all attached to the Head Quarters of the Division, but doubtless two or more cars will be allotted when necessary to detached Brigades or even Contact Squadrons.

These cars are found by the Army Motor Reserve, which includes 134 officers, and the detachment will be under the command of a Major of the corps.

The essential qualifications of these officers are that they shall be first-class drivers and first-class car-masters, that they shall be good linguists and good map readers, not only able to find their way, but to select the best roads by foreign as well as English maps, and that they shall have a thorough knowledge of Army organisation generally, and particularly of the composition of the force to which they are attached, as well as sufficient tactical knowledge to enable them to follow the operations and judge the whereabouts of units under all circumstances. In short the more these Motor Reserve officers are familiar with

military matters the better; and lastly, it is essential that they possess the virtue of being able to keep a discreet silence as to what they may see and hear in the course of their duties.

The duties upon which they will certainly be employed are :—

(a) Despatch Riding of the greatest importance, and in its highest sense, *i.e.* in carrying messages in an unknown and possibly hostile country, as distinct from mere Orderly duty within our own lines;

(b) Reconnaissance work in conjunction with Officers of the General Staff, whose place in case of accident they may be called upon to take, and whose work they may have to complete.

Complaints are often heard from officers of the Motor Reserve that their services are not fully utilized, that they are placed in the position of mere chauffeurs, and not given the opportunity of General Staff work for which their intelligence and training fits them.

Such is certainly not the view of the authorities, who realize fully the value of these gentlemen who give their services and their valuable cars to their country.

The annihilation of distance brought about by the motor car makes possible feats of communication and personal reconnaissance before unthought of.

On the one hand, however far away detached Brigades may be, Brigadiers can now assemble at Headquarters for personal interviews with the Divisional Commander, and see the situation with his eye far more clearly than any written communications could show it to them; on the other, Commanders can visit ground at distances before impossible, and see with their own eyes the positions and the country over which their Divisions may have to fight.

Motor cars, in short, widen the Commander's range of vision to an extraordinary extent, and that these cars should be driven by men intelligent, trustworthy, and helpful as only a highly educated gentleman can be adds enormously to their value and their efficiency.

To the Administrative Staff the cars are equally useful in preceding the troops to make arrangements for quartering, water and supplies before the arrival of units, and in bringing up the 2nd Line Transport and Supply Columns which may have been left far in rear.

For actual despatch *carrying* the motor cycle is obviously as good, if not better than the motor car, and it appears desirable to attach to each brigade as well as to Divisional Headquarters a number of these cycles.

The above are the obvious and every-day duties which the motor cars of the Cavalry Division as at present organised will be called upon to perform. There is other tactical work for which we venture to suggest they might usefully be detailed.

Armoured motor machine-gun wagons have of course been talked of, though we are not aware that any such vehicles have been built in this country; their advantages are small and their practical disadvantages many. If the machine guns are to be fired from the car, they are confined to the roads; if not, then the armour of the car is superfluous.

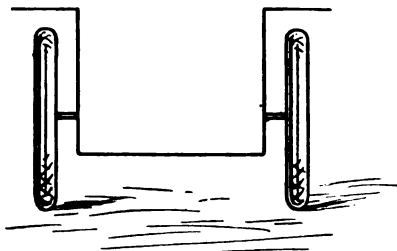
Occasions might doubtless arise when machine guns on tripod mountings could usefully be carried with rapidity to points of vantage, where their action might be decisive, and for this purpose the ordinary car is sufficient.

It appears to us, however, that in such cases automatic repeating rifles would be equally useful and more suitable to the mode of transport.

If, as is probable, a certain number of these automatic rifles are issued to each squadron, it would be easy, when required, to place six men so armed in each car and send them rapidly to the desired point. Kits and rations could be carried in the car, and thus a highly mobile and self-contained unit of enormous fire power could always be formed when required.

A useful type of vehicle for this purpose would be an ordinary motor car, of moderate weight, power and speed, with the driver's seat and a seat for one passenger in front as usual,

and with the back part of the body simply a large box with overhanging seats as shown in the vertical section below.



This truck-like body would carry ample ammunition and food, and passengers would use the projecting flaps at the side as seats.

With steel reinforcements and tough hard wood such a body could be made both light and strong, and could be fitted at small expense to any ordinary car.

It is perhaps outside the scope of this article, but we cannot refrain from alluding to the value of motor traction to the supply service of the Cavalry Division.

The Division takes the field with 300 rounds per rifle, 896 rounds per gun, and 8000 rounds per machine gun, and with four and a half days' supplies for men and two and a half for horses.

The next echelon of supply is, in the case of ammunition, the Cavalry section included in each Infantry Divisional Ammunition Column, and, in the case of supplies, the Cavalry section of each Infantry Divisional Supply Park.

The Cavalry Division presumably has an untouched country on which to live, but the collection of supplies requires time, and unless the Division is spread over a large area it will find difficulty in subsistence. It is hardly possible that the Sections of the Ammunition Columns and Supply Parks far in rear of the Infantry Divisions will ever get through the crowded roads to reach the Cavalry Division, until the battle is imminent and the Cavalry has drawn off to a flank, and then the time will be short, and the vehicles must move far and fast.

Obviously, then, these Cavalry Sections of ammunition and supplies ought to consist of motor vehicles.

The contemplated average march of a Cavalry Division is twenty-five miles daily, which is all that horsed wagons will be able to accomplish. For the second Line Transport of Units, these are mobile enough, but for the Supply Column, which will have not only to march twenty-five miles, but also possibly to collect supplies from distant villages, motor traction is the only possible solution.

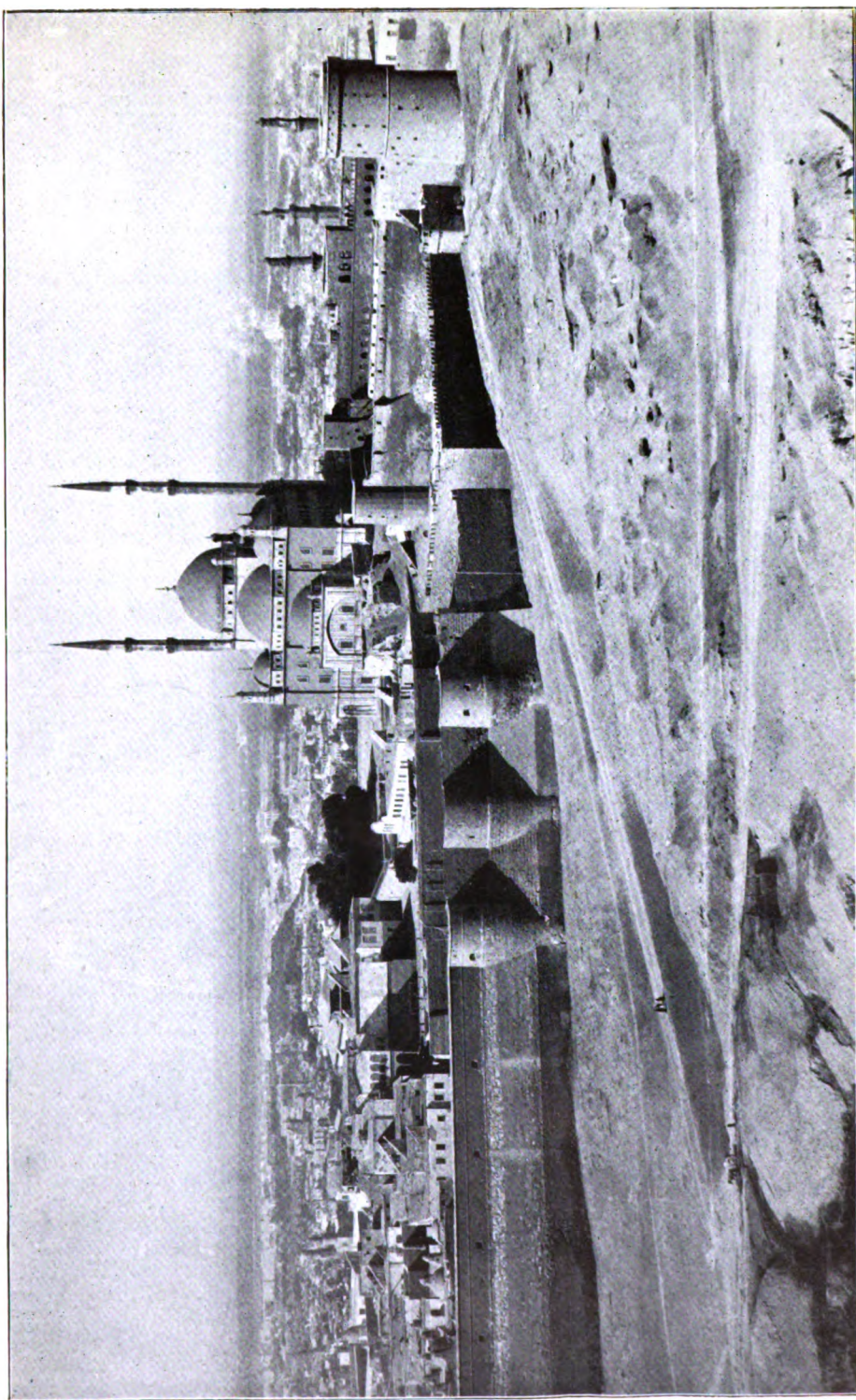
To sum up. Mobility is the *raison d'être* of Cavalry, and any device that adds to its mobility increases its power.

For intercommunication, both personal and by despatch, for the rapid transmission of orders and reports, for reconnaissance by Generals and Officers of the General Staff, and to facilitate the work of the Administrative Staff, the motor cars of the Army Motor Reserve are admirable. We have ventured to suggest their further use for the rapid conveyance of automatic rifles to important points, and we advocate the addition to the Cavalry Division establishment of motor cycles for despatch riding.

Finally we advocate motor traction for the Cavalry Division Supply Column, and for the section of the Infantry Divisional Ammunition Columns and Supply Parks destined for the service of the Cavalry Division.

The rapidity, cheapness, and reliability of modern motor traction are making its adoption both for pleasure and business yearly more widespread, and horse traction is proportionately diminishing.

The organisation of an army means the adaptation of the national resources and national methods to the defence, not necessarily passive, of the country, and among the most useful and far-reaching revolutions of modern times is the growth of motor traction suitable for the purposes of an army operating in a temperate climate and in a European theatre of war.



THE CITADEL, CAIRO.
(Built by Saladin A.D. 1190.)



A MAMELUKE.

THE MAMELUKES, OR SLAVE CAVALRY OF EGYPT

By CARABINIER

THE causes and methods of warfare in the East seldom encouraged in past centuries the recruitment of armies on a national basis. The Caliphs, for instance, who ruled at Bagdad from A.D. 750 to 1258, used thousands of slaves from Mongol and Turkoman tribes to check the influence of the Arabs. The same system was adopted by the Fatimite Caliphs of Northern Africa, a sect of Berbers who, in the tenth century, adopted a Mahdi. Even the chivalrous Saladin, builder of the citadel of Cairo, who belonged to the next dynasty, maintained the custom, while at the present day we still see in the Nizam's Arab Brigades in Hyderabad the survival of this foreign myrmidon.

Five centuries before the advent of Christian Russia, conquered and starving tribes on the barren steppes of Asia did not scruple to sell their children to the slave-dealer, who plied them with romances of the wealth of Egypt, and the lads became the Mamelukes, destined to strike blows whose echoes would ring throughout the Old World.

The word Mameluke signifies 'that which is possessed,' being derived from the Arabic *malak*, from which we get also *malik*, an owner or king, and the origin of this slave army of Egypt as a concrete organisation is traced to the thirteenth century, when the yellow peril of that epoch, Ghengis Khan's Mongolian hordes, mastered most of Asia, including Pekin, Northern China, the Sultanate of Carizme, extending from the Persian Gulf to India and Turkestan, parts of Asia Minor, and reached even to

Liegnitz in Germany and Neustadt in Austria. They enslaved vast numbers of the vanquished, for even then, as in modern Oriental warfare, those who preferred surrender to death became, *ipso facto*, the slaves, body and soul, of the victors; escape was seldom contemplated and no objections were raised to embracing the religion of their new masters or waging war against their own kith and kin.

Of these prisoners of war, 12,000, natives of the Caspian littoral provinces were bought by the Sultan of Egypt, who formed them into a body of regulars. They soon became insubordinate, and in the next reign they assassinated the Sultan and appointed one of their own number in his place. Then, increasing their numbers by purchase, and crushing all opposed to them, they became all-powerful.

To quote Sir William Muir: 'Mameluke garrisons held the citadels and Mameluke governors ruled the land, while native rule was never thought of. They were, internecine carnage and party-hatred notwithstanding, as regards the outer world, an integral and united oligarchy. Rich, powerful, and unscrupulous, they were enabled to hold the people of the soil in abject and unquestioned thralldom. The number of fighting Mamelukes, irrespective of what we should term employed men, varied from 30,000 to 60,000.'

According to Yakub Artin Pasha, the Mamelukes never pretended to create a race by inter-marriage with the inhabitants of the countries in which they held sway. Even with the female consorts of their own race they never established dominant families or an aristocracy. A child never succeeded his father, but the slave succeeded his slave-master. The nearer we approach our own period in history the more we see that this idea of a democratic slave-soldiery predominated among them. Fighting was their principal interest in life, and about 90 per cent. died a violent death. Under such circumstances family life became well-nigh impossible.

Thus these needy and degraded bondsmen, ennobled by

martial discipline and religious enthusiasm, but pervaded by a pernicious socialism, soon developed into hard-riding and determined horsemen, and became the backbone of the Saracens. Having breathed in their infancy the Scythian air, they had also imbibed the 'horse sense' from their earliest surroundings and thus took naturally to the saddle when it became necessary for them, like the Oriental armies of all ages, to disperse in order to live on the country or rapidly to concentrate for a raid. They



were by origin the antithesis of the Franks (Free men), as the Crusaders were called, a word which, corrupted to Feringhi or Farang, is used to this day throughout the East, even to China, by the natives to denote any European.

THE CRUSADES.

The sixth crusade opened with the capture, in 1249, of Damietta, by St. Louis of France; but the Nile flood combined

with the Mamelukes to encompass his downfall, and Louis was made a prisoner with the greater part of his nobles, while the contingent sent by the Count of Holland was destroyed. The death of an Englishman, William Longespée, second Earl of Salisbury, who fell in the battle, is thus recorded by a contemporary :

List with grief and with pity who wish to be told
Of the good William Longespée, the champion so bold,
Who at Shrove-tide in Egypt his life-blood hath spent
As among the great host of King Louis he went,
At a castle of Egypt, Mansoura by name,
Which shall never in Paynim relinquish its fame,
For t'was there that King Louis a captive was ta'en
With the other brave knights who were in his train.

We read that William Longespée first had the left foot cut away, then the right hand, and was only slain at last because he refused to surrender to the infidel.

All who could not redeem their lives by service or ransom were massacred in cold blood, and the walls of Cairo, seven miles in perimeter, were decorated with their heads. The relics of the French Army, on payment of a million pieces of gold, embarked for Palestine, and after four years returned to their native land.

In 1258 the Mongols had stormed and sacked Bagdad, Aleppo, and Damascus, and threatened to join the Franks in the deliverance of Jerusalem, but the Mamelukes met the invaders in many a well-fought field, and gradually drove them back to Persia.

The seventh and last crusade, on the death of St. Louis of France at Tunis in 1270, was abandoned by all but the English Prince, Edward Longshanks, who at the head of 1,000 of his countrymen delivered Acre from a siege, marched to Nazareth with an army of 9,000, and extorted by his valour a ten years' truce. The Prince was stabbed by a fanatic, but his wife sucking the poison from the wound saved his life.

MAMELUKE CONQUESTS.

The Mameluke Sultans now embarked upon a series of conquests. The borders of Asia Minor and the Armenians were raided ; Cilicia was given over to rapine and flames, the Nubians were defeated in a battle south of Dongola, while the Holy Land was devastated by the slaughter of 17,000 and the captivity of 100,000 of her inhabitants.

In 1291 the Mamelukes with 60,000 horse and 140,000 foot, marched against Acre, the last foot-hold of the Crusaders. After a siege of forty-three days the city was stormed and death or slavery was the lot of 60,000 Christians. The Mamelukes demolished the Latin cities, but left the Holy Sepulchre untouched and accessible to unarmed pilgrims. Subsequently, in 1303, the Mamelukes defeated the Mongol army, 100,000 strong, near Damascus, while in 1304-5 they attacked the Armenians and Druses.

In 1308 to 1320 the Mameluke dominion was extended westward to Tripoli and even to Tunis, and in 1366 was established in the Soudan and at Suakin.

TURKISH RULE.

It was not till 1516 that the Mameluke forces met their match in the Turkish army under Selim and were defeated near Aleppo. The Mameluke Sultan Kansowa fell, and to prevent his identification one of his own men cut off and buried his head. To show his contempt for the garrison the victorious general sent a lame soldier, armed with a wooden club, to demand the keys of Aleppo, and the Mamelukes' supplies, comprising a million gold pieces, became the booty of the conquerors. Subsequently, after three months' fighting at Cairo, Selim put an end to the Mameluke kingdom and placed a Turkish Pasha as Governor of Egypt. This Government maintained by the renowned Janissaries, a corps of Infantry levied from the conquered states on the lower Danube, lasted as long as 200 years.

In 1750, however, Turkish authority in Egypt began to wane. The number and wealth of the Mamelukes made them the virtual rulers, and they continued to multiply their numbers by the flow of slaves from Siberia, Circassia and the adjoining countries. Their influence was so great that none but Mamelukes could become Beys and their head came to be called Sheikh el Balad or chief of the land. Finally the Sheikh, Ali Bey, deposed the Ottoman Governor, assumed independent power, conquered Syria and the Bedouins, and was recognised as Suzerain of Arabia by the Sherif of Mecca.

THE ERA OF NAPOLEON.

In 1798 Napoleon invaded Egypt with the ostensible object of assisting the Porte by overthrowing the power of the Mamelukes. In his memoirs he gives the following criticism :—

‘Two Mamelukes would hold their own against three Frenchmen, because they were better armed, better mounted, better drilled. They had two pairs of pistols, a blunderbus, a carbine, a helmet with visor, a coat of mail, and many horses and servants on foot to aid them. But 100 French Cavalry would not fear 100 Mamelukes, 300 would conquer a like number, and 1,000 would beat 1,500, so great is the influence of tactics, order, and manœuvres.’

At this time their horses comprised both barbs and high-caste desert Arabians, obtained from the Druses of Howran and from the Bedouins on the East of Syria and Palestine, but the most highly prized chargers were bred by the Muteyr tribe of Eastern Nejd and by the Kahtan.

On July 3 of that year Alexandria was carried by assault, and three days later the first division of the French army, over 30,000 strong, set forth by night into the desert south of Alexandria. Moving on Cairo it was continually threatened by Mameluke and Arab irregular horsemen; at Rahmanieh, Desaix, the French General, was attacked by 600 Mamelukes, but succeeded in dispersing them, while at Chebreiss a charge of 800 of them was

turned aside, though skirmishing continued until the decisive battle of the Pyramids, on July 24. Here Murad Bey, with 10,000 Mameluke horsemen and a host of ill-trained infantry, occupied an intrenched position, the right resting on the Nile bank at Embabeh and the left stretching towards the Pyramids. As day broke Napoleon, facing the Pyramids which were now in sight, addressed his army in that well-known speech, 'Soldiers, to-day you are going to fight the rulers of Egypt, remember that from the summit of these monuments forty centuries look down upon you.'

Seeing that the forty Egyptian guns were immobile, Napoleon moved west to outflank the position from the desert. A confused swarm of 7000 Mamelukes then charged the French squares as they were carrying out this movement. They were met by French artillery fire and volleys from the squares which were formed six deep. Those Mamelukes who were not mowed down by the pitiless fire attempted to break the squares by reining their horses back on to the bayonets and at the same time using their firearms. Furious at their ill-success, they hurled the empty weapons at the heads of their foes. A score of their most daring cavaliers perished in the midst of the squares. Those who were dismounted crept up to the phalanx of infantry, cutting with their scimitars at the legs of the front ranks. At length, however, the Mamelukes, as Alison tells us, 'were thoroughly beaten and fled in confusion, leaving a rampart of dead men and horses around the squares, terrible proofs of the pertinacity and bravery with which they had fought.' The losses of the Mamelukes were no less than 2000 slain, while the French loss was only counted in hundreds.

The Pasha, Said Abu Beker, retired on Salahieh, but the French pursued and drove him into Syria.

Murad Bey fled after the battle of the Pyramids into Upper Egypt with a force of 4000 Mamelukes and 8000 Bedouin Arabs, and on October 6, Desaix with his division opened the battle of Sediman by attacking this force. The

French were formed in three squares as a protection against the mounted Bedouins who covered the plain, while their well-served Field Artillery drove the Egyptian army from its position. Desaix pursued in the same formation, and on the morning of the 7th met the Mamelukes advancing against him. The Mamelukes' charge broke one of the squares, but the flank fire from the other squares saved the situation. Murad now unmasked a battery and the guns told seriously on the French infantry. Desaix saw but one chance of success, namely to charge and take the guns, and this was done under the command of Captain Vallette of the Chasseurs. As the Republican army pursued the retreating Mamelukes 'along the shores of the Nile, the ruins of Luxor opened to their view, and the astonished soldiers gazed on the avenues of sphinxes, obelisks, and ruined temples, which are destined to perpetuate to the end of the world the glories of the city of Thebes.'

The French, however, had a set back when, after the destruction of their fleet on August 1, at the battle of the Nile, the Mussulmans rose against them in all directions, and massacred General Dupuis and 300 officers and soldiers. In Cairo the French retaliated with extreme severity and eventually broke up the rebellion.

After further fighting against the Fellaheen, who had broken into revolt, the French assumed the reins of Government and even began raising an Egyptian army under French leadership. After an encounter with Arabs on the site of the ancient Heliopolis, the French occupied Suez, where Napoleon, wishing to imitate the glories of Sesostris and Trajan, soon turned his thoughts to the construction of a canal from there to the Mediterranean.

In 1799, after the capture of Arish, Gaza, and Jaffa, Napoleon with 13,000 men and his new camel corps besieged Acre, defended by the Turks, who were assisted by Sir Sidney Smith with two of His Majesty's ships. Napoleon's siege train, which was being sent by sea, was intercepted by the

British, who captured seven of the vessels with their stores and forty-four siege guns, which were eventually mounted on the defences at Acre. During the investment a large Turkish force advanced to raise the siege. This force consisted of the remains of the Mamelukes, the Janissaries of Damascus and Aleppo, as well as an innumerable horde of irregular Cavalry. Napoleon was alarmed and sent Kleber from Acre to join Junot at an advanced position near Nazareth. On this march he defeated 4000 horsemen, but on the 8th, Junot, after an engagement lasting some hours, was obliged to retire upon Nazareth.

On April 16 Kleber moved to attack the Turkish camp at Mount Tabor and was met by 20,000 Cavalry and as many Infantry, whose impetuous charges he stubbornly repelled for over six hours, till the arrival of Napoleon in person. After surveying the field from a height, Napoleon launched his Cavalry and Horse Artillery against those Mamelukes who were still in reserve, and attacking the remaining Turkish forces in flank and rear with Bon's division in three squares, drove them from the field.

The bombardment of Acre continued for sixty days and nights. There were twelve assaults, and on repeated occasions the combat raged in the breach for hours until the survivors were actually parted by a barrier of the dead. French accounts admit that the fallen remained unburied, and Napoleon with difficulty persuaded his soldiers to cross the ground heaped with the corpses of their comrades. At length the Turkish fleet brought reinforcements from Rhodes. Whereupon Napoleon, after two more despairing assaults, raised the siege by night, buried his twenty-three heavy guns in the sand, burnt his camps, and then, with no impedimenta beyond the supplies necessary for the march, retreated to Egypt. According to accounts, which were, however, afterwards denied, the hopelessly wounded and plague-stricken were mercifully dispatched; while in the hospital at Jaffa, which was full of sick and wounded, 580 miserable

soldiers are stated by Cust to have been suffocated with opium, so that they might not fall into the hands of the Mussulmans.

During the Syrian operations Desaix had ascended the Nile in pursuit of Murad's Mamelukes, and the inscription recording his occupation of Upper Egypt remains to this day cut on the face of the cliffs at the first cataract of the Nile.

A fanatic, styling himself the Mahdi, now appeared at Damanhour. General Lanusse was sent against him with over 2000 men, and on May 20 drove out the rebels and burnt the town.

On July 25, 1799, 18,000 Turks who had landed in Aboukir Bay were driven into the sea by Napoleon. Shortly after this he left for France, appointing Kleber to the Egyptian command.

On March 20, 1800, Kleber, who had collected 12,000 French veterans from all parts of Egypt, defeated the combined army of the Turks and Mamelukes at the Battle of Heliopolis. In this battle the French were formed in four squares, with Artillery at the angles and the Cavalry in the intervals. Companies of Grenadiers doubled the corners.

Denison writes : ' An attack was made on the camp of the Janissaries in the village of Matarieh which was advanced far in the front of the Turkish Army, and it was soon captured, and large numbers of its defenders killed. The Turkish main army then advanced to attack the French, who formed a line of squares with the Artillery in the intervals and the Cavalry in rear of the centre ready to charge through at the critical moment.

' The battle commenced with the fire of the Artillery, which was more effective on the part of the French than on that of their opponents. The cannonading so galled the Turks that they prepared for a general charge. The concentration of their masses warned the French of the coming onslaught: 20,000 horsemen at full speed shaking the ground with their thundering tramp was enough to try the stoutest heart. The French stood firm, however, while the Artillery poured volley after volley of grape shot with hurried vigour into the advancing masses. The

front rank were nearly all swept away by the storm of missiles which filled the air, and the rear ranks, dismayed at the carnage, wheeled about and fled before a single musket shot had been fired.

‘The Grand Vizier rallied his troops and attacked again, but in a short time the whole Ottoman host fled in utter rout, leaving Kleber complete master of the field and of their camp.’

Kleber, however, only survived to fall a victim to an assassin in Cairo.

The following year the Grand Vizier again took the field with 25,000 men and marched to Belbeis. General Belliard, the French commander, resolved to crush him before he could be joined by the Anglo-Turkish Army, and for this purpose detached 5000 men with a proportion of Artillery. Two English officers, Majors Holloway and Hope, attached to the Vizier’s head-quarters, persuaded him to anticipate the attack of the French. The result was that the French were assailed in a wood during their march and driven back to Cairo.

On March 21, 1801, the British, with the loss of General Abercromby, defeated the French Army of Egypt at Alexandria, and on August 28, 1801, the French yielded to the British under General Hutchinson.

England, having accomplished her object, evacuated Egypt in 1808.

THE MASSACRE OF THE MAMELUKES.

At length, in 1805, Mahomed Ali, Pasha of Egypt, gained the supreme authority, and fearing the Mamelukes, who now numbered 20,000 good fighting men, took measures to get rid of them. But it was not till six years later that he put an end to the leaders of the race, and then only by a perfidious stratagem. The Beys and Emirs were invited to an entertainment in the citadel. On their taking leave, the outer gates closed with an ominous clang, and, every way of egress barred, the whole body, said to have been 470 in number, were shot down by troops

concealed on the roofs, battlements, and outside the windows. One Mameluke only, Amin Bey, who had remained in his quarters from sickness, mounted his charger and, deeming other means of escape hopeless, spurred him over the ramparts, and fell fifty feet below. The horse was killed, but the rider, whose ankle was broken, was able to crawl to safety and survived for thirty years after his escape, being known in Cairo as 'the last of the Mamelukes.'

Of the rank and file of the Mamelukes, some who were supporters of the Pasha were spared, while 2000 under eighteen years of age were incorporated in his body-guard, but the majority were either slain or chased abroad.

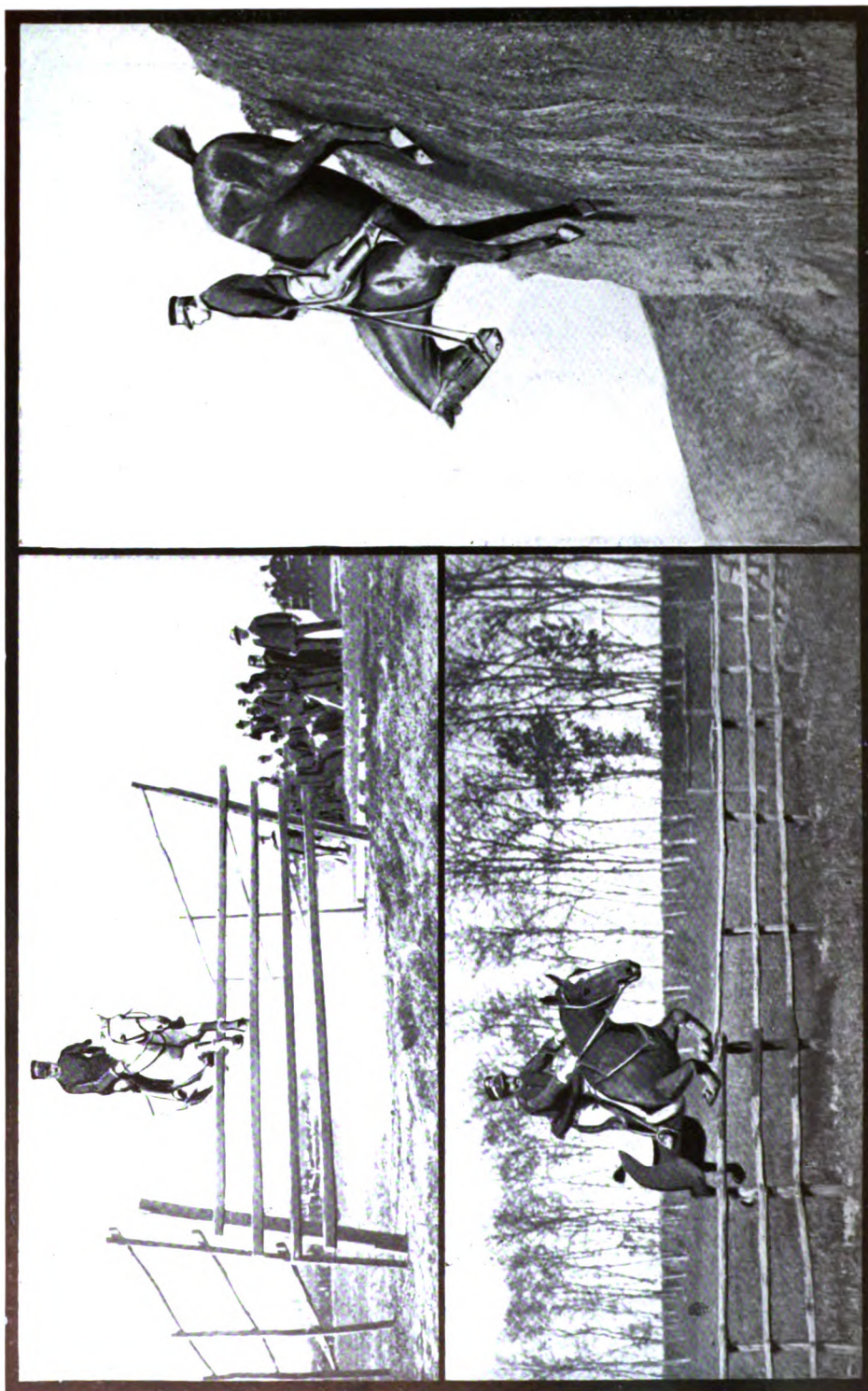
Some hundreds built a town in Lower Nubia and endeavoured to strengthen their force by disciplining negro slaves, but these were finally dispersed. Their last fastness was Shendy, between Berber and Khartoum, now the head-quarters of the Egyptian Cavalry; some died there, many were absorbed into the Jaali tribe of riverine Arabs, whilst others took service in the forces of Mahomed Ali which went to the Soudan in 1824.

But the customs of the East are not to be abrogated by the mandate of an individual, and newly-acquired or returned Mamelukes were in a few years again to be seen in Cairo till, in Arabi Pasha's rebellion in 1881, more than half of the officers of the Egyptian army were stated by Yakub Artin Pasha to have been Circassian Mamelukes belonging to the vice-regal family.

Some traces yet exist of this caste, which was successively brave, cruel, artistic, and depraved, whose life-blood poured out in rivers has filtered deep into the desert sands, leaving only a lurid stain to mark its course. The tombs and strongholds of these slave-soldiers stand as lasting evidence of their virile existence, and we still see many educated men of Mameluke stock well satisfied to be employed under the ægis of the *Pax Britannica* in the Egyptian Government Services.



AMIN BEY.
"The Last of the Mamelukes"



ITALIAN CAVALRY.

TRAINING OF ITALIAN CAVALRY OFFICERS

By MARCHESE ORAZIO PUCCI

THE numerous prizes won by Italy's military officers at the horse show at Olympia last year and this year have not unnaturally drawn attention to the horsemanship of that country.

It is proposed in the following article to give a short description of the training an Italian Cavalry officer receives before he can be passed into line as an efficient horseman. The system itself is quite modern and a vast improvement on the one that preceded it.

Every student desirous of obtaining a commission either in the Cavalry or Infantry has to pass through the school at Modena. Before presenting himself he must have already received such an education in one of the various schools of the country, answering to the public schools of England, as would entitle him in civil life to graduate at the university. At the beautiful old palace of the ancient Dukes of Modena two years is passed. In the vast, sparsely furnished and unheated rooms, once the scene of gorgeous banquets and brilliant balls, a life of spartan simplicity is endured, and there is now little to recall the splendour of bygone days and the almost regal magnificence of the ducal house. The young 'aspirant,' shivering in the large rooms, oblivious of the past and living only in the present, wears for the first time the uniform of his country and looks forward, with eager anticipation, to the moment when, in the spacious courtyard, he will swear fealty to the reigning house of Savoy and will wear on his collar the five-pointed star of Italy which proclaims him a soldier.

It is not necessary in this article to refer to the various studies, other than equitation, which are carried on during the

two years' course ; I will draw attention only to the preliminary training which he receives in the art of riding.

The young men, many of whom possibly have never ridden before, have to pass an hour each day in the riding school. After a few days of the saddle of 'ordinanza' he is promoted to an ordinary saddle without stirrups. The saddle of 'ordinanza' is that used by the troopers, formed of two padded leather flaps, high in the cantle, which gives a sense of armchair security to the rider, and, though heavy, is easy to the horse, and with the aid of a blanket prevents that bugbear to the Cavalry officer—a sore back. As soon as he gains confidence he is encouraged to practise various gymnastics on horseback for the purpose of gaining his balance and becoming independent of either reins or stirrups.

At one time about eighteen young men divided into two sections were trained simultaneously, the leading files being answerable for both cadence and distance, but now more individual attention is given by the riding master to each pupil, who is answerable for his own time and distance. This improvement is due to the initiative of the present Inspector-General of Cavalry, General Berta, who has also simplified the previous complicated system of aids, to the advantage not only of the recruit but also of the horse himself, who thus more easily understands what is required of him. The Italian system was and still is to train a horse to trot slowly and gallop fast.

Simplicity is aimed at, and all complicated parade movements have been abolished. The riding school is now used only for preliminary instruction and during inclement weather. The object at Modena is to gain a perfect seat and learn the first principles of equitation, which is all that time allows, as his various other studies absorb most of the student's attention. In the past all that was required of a Cavalry officer was courage, but to-day a more technical education is necessary, and the modern Cavalry officer must be not only courageous but highly trained. With every campaign the mission of Cavalry grows

in importance, and the more so as the Commander's strategy has now to a greater extent than ever to depend on the information which they can obtain, as well as on their general efficiency in the vanguard of the army.

After having passed the necessary examinations the aspirant obtains his commission and is transferred to the Cavalry school of Pinerolo, where the real hard training begins.

A small town not far from Turin, surrounded by mountains, Pinerolo is situated in one of the most picturesque valleys of Italy, and when the sun is shining the contrast between the silver of the snow-clad mountain tops and the green of the valleys makes a most pleasing picture. Historically the place is not without interest, for in years gone by it was the site of a political prison, recalling the sufferings of vast numbers who had ideals of freedom and independence in advance of their age. These dismal memories of an unhealthy past have little effect on the spirits of youth, and the months spent at the school remain with the Cavalry officers as amongst the happiest recollections of their lives. They have reached the object of their ambition, they are officers, they wear the brilliant uniform of their regiments for the first time, they are free and independent, or imagine themselves to be so, they have a horse of their own and plenty of others at their disposal; moreover, all worrying studies are finished and they can give their undivided attention to horsemanship.

Originally the school called 'Scuola Normale' was situated at Veneria Reale on the other side of Turin. Italy being composed of many different nationalities, each having its own school of equitation, Carlo Felice, King of Piedmont, established in 1823 Veneria Reale for the purpose of giving uniformity. This school lasted until the Austrian war of 1848, when so many officers were on active service that it was disbanded and removed the following year to Pinerolo, where it has since remained.

In 1868 a special course of training 'corso magistrale' was added to furnish good riding masters to the regiments of

Cavalry. Colonel Lanzavecchia di Buri went to France and Germany to find a good instructor, and chose Cesare Paderni, an ex-officer who had received his training at the final school (' scuola di perfezionamento ') of Vienna.

Cesare Paderi's methods long held sway in Italy. No doubt he turned out many good riders and was himself a famous horseman, but to the modern views his methods were faulty and inept, inclining more towards subjecting the horse to his rider's will than encouraging freedom and training the quadruped by gentler methods to obedience. He taught that the horse should be subject always to his rider and be ruled by fear. Controlled by the bit, his head firmly held, and constantly punished by whip and spur, the horse became fidgety and restless. In jumping the rider was taught to pull up the horse, and many a poor beast suffered in the mouth and back in consequence. To elude this torture the horse frequently refused, and then began a fight for mastery with whip and spur, ending, if the rider were efficient, in the horse rushing at the obstacle.

Under such a system no formidable obstacle could be cleared, and it is one of the greatest and most pleasing results of the modern method that heights previously deemed impossible are now easily negotiated.

Colonel Cav. A. Berta (now General), Maggiore Barallis, Captain Savoiroux, Captain Giacometti (now Colonel), and Captain Caprili were the principal leaders in the campaign against the old theories, and the Count of Turin, General of Brigade and ex-Colonel of the ' Bianchi Lancieri,' the beautiful regiment of the Lancers of Novara, a brilliant horseman who has done so much to improve the Cavalry, has always given the new method his most earnest support. Little by little, at the suggestion of either one or other of these officers, the conviction has been arrived at that the horse should be as free as possible and that the rider should only suggest what he is to do, and help him to do it in the way that is most natural to him. To be a good rider it is not sufficient merely to be bold and firm in the

saddle, but one must have a complete knowledge of the powers and disposition of the horse. The greatest results from these improved methods have been achieved in jumping, which will be now described in detail.

It is considered necessary that the horse should first be studied and trained in jumping without a rider, not only to give the animal confidence in his own powers and freedom from fear of any penalty in the shape of a whip or spur for absolute or partial failure, but in order that the man who is afterwards to mount him may observe his methods—all horses naturally do not jump in the same way, and a correct appreciation of each case will assist considerably when the lesson is more advanced.

As young men are trained in athletics to jump higher and higher by putting the bar up a peg at a time, so horses can be gradually accustomed by slow and sympathetic training to take higher leaps until without fatigue they excel all their early efforts.

Confidence in his own powers having been established, the horse is now ready for the second stage and, with a rider on his back, the bar is raised gradually and the leap taken first at the trot and afterwards at the gallop. The seat of the horseman during the jump is of considerable importance. To give a clear idea of the new method it will be as well to divide the jump, as now practised, into three parts. First the approach, second the leap, and third the landing.

In the approach, great stress is laid on the horse being given absolute liberty ; he must not be rushed or in any way coerced ; his neck must be free, so that he can judge for himself the height he has to clear, and see exactly what is required of him. In the leap care must be taken not to interfere with the natural action of the animal, who knows better than his rider how he can best perform his task. Here the study above referred to of the animal's action will greatly assist the rider.

In the landing it is unnecessary to do more than convey the feeling, moral very often more than actual, that in case of mishap he will have the support of his rider. The art of the

rider in the above movements, though apparently simple, can rarely be acquired without considerable practice and the most painstaking tuition ; whilst free play to the animal is imperative, control must not be lost, the rider must be absolute master, able to keep the horse resolutely to the task in hand, sensitive at once to any attempts to swerve and able immediately to check them.

As the actual leap is being taken, the rider's body should be slightly bent forward, the arms extended, hands kept low, and when just over the jump the body should be perpendicular to the horse's back, remaining in the same position when landing, but with the hands drawn in.

In the broad jump the same principles apply, but the pace is quickened to increase the impetus and give the horse a better chance of getting over ; and in a combination of the two—height and breadth—the principles applicable to broad jumps must preponderate.

The method of jumping has been discussed in some detail because of its importance, but simultaneously with this practice the rider is trained in the higher art of horsemanship, which may tersely be described as a thorough understanding of his animal. For this purpose he is given different classes of horses to ride—the thoroughbred, the Irish, and the native-born animals—each having their own idiosyncrasies, and the best horseman will be he who understands them and is consequently able to get the most out of each horse without exhausting, or in any way impairing its efficiency. How often do we read in the history of a campaign that the Cavalry were ridden to a standstill. Except in very occasional cases this should never occur, and usually implies not only bad horse-mastership but bad horsemanship.

The principal outdoor exercises are carried out at the Galoppatorio di Baudenasca, distant two or three miles from the school, where in any weather the ground is fit for riding. Artificial obstacles, which are made to resemble as closely as possible those found in nature in all countries, have here been

erected, commencing with the easiest and increasing in difficulty towards the end of the course. Amongst the latter may be included the 'Banchetta irlandese' (Irish Bank), well known to the follower of hounds in that island.

When time and weather permit, the instructor takes his pupils, usually twice or thrice a week, into the open country, where various natural obstacles are encountered, and here may be found many steep inclines closely resembling the famous descent of Tor di Quinto near Rome.

The most typical ride in the neighbourhood is the Rocca di Cavour, a rather steep high hill surmounted by a dismantled tower from which the descent is made by artificial steps cut out of the rock, a somewhat formidable task when undertaken for the first time.

The life at Pinerolo is ideal, the constant hard exercise conducive to robust health and high spirits drives away all worry, and no young man leaves the school to join his regiment without regret and the keen recollection of the healthy surroundings in which, for the last eight months, his life has been passed.

After two or three months' regimental duty the young Cavalry officer will be drafted to the school at Tor di Quinto, which may be likened to the university course of his riding.

This school is probably the best organised in the world, and is frequently visited by Cavalry officers of other nations and many others, amongst them crowned heads, as well as many ladies, who take an interest in riding.

Here is put into practice the knowledge previously gained at Pinerolo. Daily cross-country rides of several hours' duration are undertaken, and the habit of thinking nothing impossible for the noble quadruped is ingrained. The utility in active service of the knowledge thus acquired cannot be over-estimated, and is bound to prove of advantage in scouting and covering the advance of an army in new and unknown countries, in conveying messages, or in rapid communication between outposts and their supports.

Two exercises at this school call for special mention, one because it is so well known, and the other, though not so famous, on account of its greater difficulty. Close to the school is the famous descent of the Tor di Quinto. This small hill, about 20 feet high, is almost perpendicular from its summit and even on foot could only be descended by sliding. The descent on horseback looks more difficult than it really is, and Italian officers are unable to understand the surprise that the descent so constantly evokes. It does not require much training, the whole secret being to keep the horse's head and shoulders straight, in which case he will slide on his haunches in the most natural way from top to bottom. Any deviation from the correct poise would of course result in disastrous consequences, but confidence in the rider and the necessary moral conveyance of that feeling to the horse is the principal factor of success. Many people seeing this reproduced in photos or cinematographs think it is a trick of photography. This is incorrect, the photos have been taken from an actual occurrence.

The other and far more difficult obstacle is a fence at the edge of a hill with a considerable drop on the far side leading by a steep descent into a valley of considerable depth with a rapid ascent on the opposite slope. To be able to ride at high speed and clear the fence successfully may be considered the blue ribbon of riding, and requires great 'sang froid' and knowledge.

The country round Rome being very undulating and with meadows divided by well-known 'staccionate,' which are too stiff to be easily broken, makes hunting difficult and dangerous, but this is part of the young officer's training and completes his riding education.

It would have been easy to give a more detailed description of Cavalry training, but in an article of this description I have attempted only to give a general idea.

Before closing I should like to express my appreciation of what is of such importance for horsemen, the knowledge of the horse possessed by English riders, to whom the above description of Italian Cavalry training may not be without interest.

MOUNTED COMBAT (SWORD VERSUS LANCE)

By BENGAL LANCER

ALTHOUGH the writer of the following is a lancer, a perusal of it may leave the impression that he holds a brief for the sword. Though this is far from being the case, he does (*placent* the Hussar and Dragoon) see some chance for a good swordsman in a combat even with a fairly efficient lancer.

Believing that a lancer will not become expert with his weapon until he practises against a good swordsman, and holding also that in these busy times a lancer has his work cut out to learn to handle two weapons (rifle and lance) without the addition of a third (the sword), the writer in his recent course of individual training discarded the usual custom of giving the whole squadron instruction equally in sword and lance practices. Instead, he selected a few men from each troop whom he trained to some proficiency with the sword and then utilized them to take on the rest of the squadron fighting with its normal weapon, the lance.

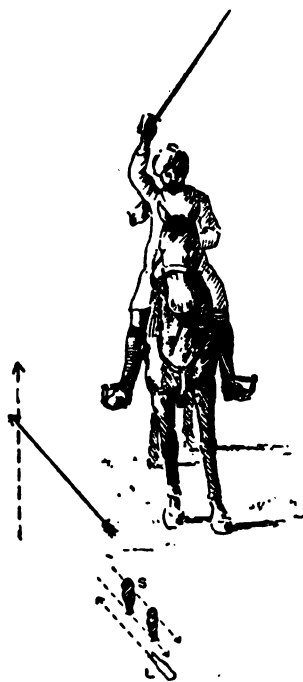


FIG. 1.—REPRESENTING A LANCER PASSING SWORD IN THE DIRECTION OF THE STRAIGHT LINE ARROW.

Sword is *passaging* on lines parallel to arrow, i.e. he is not advancing straight towards one, but *passaging* towards the right bottom corner of the picture. If, however, he were moving on straight lines straight out of the picture towards a lancer meeting him along the *dotted* arrow direction, the lancer on arriving within reach of sword would see the whole of the latter's body.

The results noticeable from this scheme were that the lancer, hitherto unaccustomed to meet anything like skill in a sword-armed opponent, at first more often than not went down before the swordsman ; secondly, perceiving the weakness of his methods and acting on the principles hereafter mentioned, he improved immediately and soon made it a very difficult business for the sword to get in. In fact when the latter did score it was usually due to the greater handiness of his horse which had been included in the swordsman's special training.

It was while attempting to turn out a few passable swordsmen and seeing their first successes against the lancer that changed

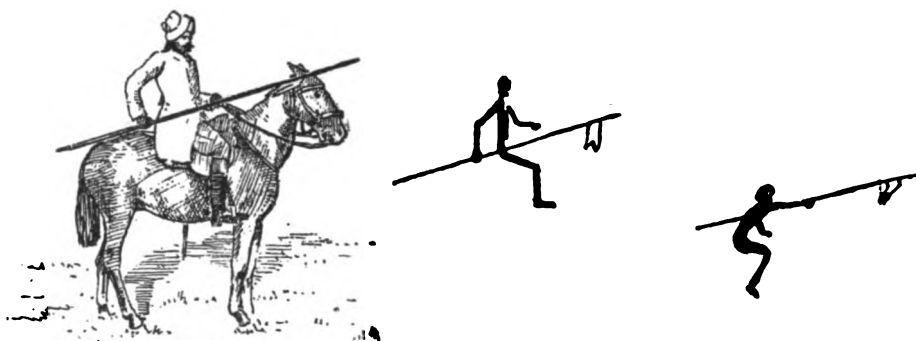


FIG. 2.—PREPARATORY POSITION FOR POINT AT BODY.

The hand could be further drawn back and the point lower as in hand sketch.

the writer's view in regard to the chances of a sword *versus* lance—which he confesses he used to consider small. He saw that a fairly good swordsman, using his head and preserving his nerve, has more than a good chance against the ordinary lancer (trained and practised, be it remembered, against the feeblest form of swordsman—a lancer armed with a sword).

Whether the swordsman's chances against even a moderate lancer would be so good in war is another matter. In peace not even the padded point of the lance is used against the horse : in war one prick of the naked point at the horse of the swordsman might throw the latter at the mercy of the lancer.

The following is not intended to be, though it may read, dogmatic. It is the result of what has been an effort to arrive at a scheme of instruction a little more skilful and finished than

is usually found in the training of men to prepare themselves for the personal combat.

The principle of the Lance.—Having little or no power of defence but, from the fact of its reach, a great power of offence, the principle of the lance is attack pure and simple.

The principle of the Sword.—When pitted against the lance, the tactics of the sword are defensive—offensive: that is, its attitude should be defensive until the lance's advantage of reach is by some means overcome or neutralized, when an active and determined offensive at closest quarters is immediately adopted.

Reach being the lance's great asset, all considerations for its use must be based on (1) taking the fullest advantage of it, and (2) preserving it. To insure (1) the point must be made at the fullest stretch of arm and body. By delaying the delivery of the point (a common fault) or making it with less than

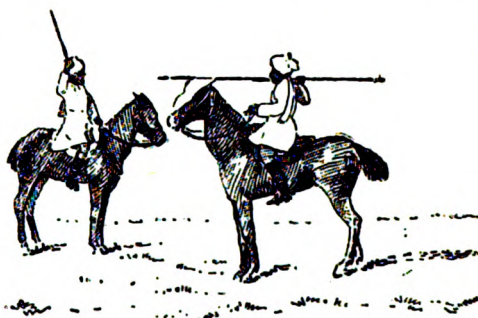


FIG. 3.—THE LANCE POINT AT THE HEAD.
Elbow might be higher.

the full stretch of arm, the lancer allows the swordsman to come in and (as far as reach goes) to fight on equal terms. To preserve and retain the advantage of reach, the lancer must make his attack on straight lines, at the gallop—or fastest pace allowed—and with his horse collected. Once off straight lines and on circular ones the lancer relinquishes much command of his weapon and concedes a great advantage to the sword. He must gallop: first in order to give his point full value and to make it more difficult to parry, and secondly that, should he miss his man, he is clear of him. His horse must be collected so that, having missed his man, passed and got some distance from him, he can turn on his haunches and, springing off, repeat the attack with the same advantages—and with more skill. To sum up, the lancer should use and preserve the advantage of reach by galloping fast (at and past his adversary), on straight lines, and with his horse fully

collected. Now before deciding how the swordsman is to approach the lance it is necessary to examine his means of defence and attack. The whole object of the swordsman being first to neutralize or escape the power of the lancer's deadly reach and then to attack, the following seem to be his alternative or alternating actions.

(1) Parry the lance point, wheel and pursue, his whole mind fixed on the determination not to let the lancer tilt at him again, and, if unable to collar him before he has faced round again, at least to diminish the distance over which he (the lancer) may get up speed for his second attack.

(2) Dodge the lancer's point and pursue as in (1).

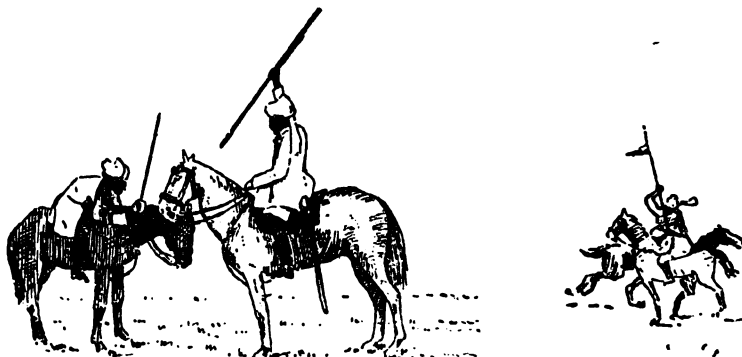


FIG. 4.—THE THRUST AT DUCKING SWORDSMAN.

Latter should have been photographed almost alongside of lancer as in smaller sketch.

(3) Dodge the lancer's point and simultaneously counter-point.

To enter the combat on the same lines as the lancer and to ride fast and straight at him means, given things equal, that the swordsman is impaled upon the lance before ever he reaches within three feet of the lancer's body.

Therefore this means of approach may be eliminated and for (1) and (2), at least, the slow collected advance on diagonal lines should be adopted; while for (3), let the pace be what it may, there must be the diagonal approach. Why the slow approach? Because, almost impossible at fast pace to parry a point, it is just less difficult at a slow one, while it is the only pace at which the horse can be wheeled dead on his haunches and so lose no ground

for the subsequent pursuit. Now as to the diagonal advance for (1), (2), and (3)—what are its advantages? These:—

- (a) The horse's head and neck conceal the body and most of the swordsman's chest from the lancer's view.
- (b) The lancer is therefore deprived of his most deadly point, viz., the low under-hand one delivered at the body.
- (c) It confines the lancer to the over-arm point at sword's head, which is the easiest point to parry or dodge.
- (d) The horse is already a quarter way round the turn the swordsman is going to make for the pursuit of the lancer.

Some explanation may be needed as to the dodging (or ducking) mentioned above.

It has been said that by the diagonal advance the sword only offers to the lancer a view of his head and upper chest (*vide* fig. 1). The lancer's point therefore may be expected high. To parry this point, even though the least difficult, requires much skill, while it only requires right timing (as in boxing) to duck the body and head to allow the lancer's point to go 'empty.'

If the swordsman synchronizes the 'duck' with the delivery of his point at lancer's body—it should be a bad day for the lancer.

To sum up then for the swordsman, whose first aim should be to neutralize or evade the reach of the lance and then get to close quarters, he must advance slowly, with his horse perfectly collected and in all cases on diagonal lines.

Handling of the lance (versus sword).—The normal point at the body should be made, not from the 'engage,' which seems a valueless position, but with the hand drawn back to the furthest possible extent behind the hip (*vide* fig. 2). Extra power is thus given to the point, while the position also keeps the lance out of the reach of the cut-parry of the sword. From behind the hip the hand is carried forward to the fullest extent of the

arm, and if the weight of the body be also thrown forward the force of the point as well as its reach will be very considerably enhanced. Fig. 8 shows the body only fairly well forward.

The point at the head against a swordsman who approaches diagonally is made with the elbow raised to a plane horizontal with the shoulder, the hand level with or above the head, *vide* fig. 3, which shows the elbow rather low.

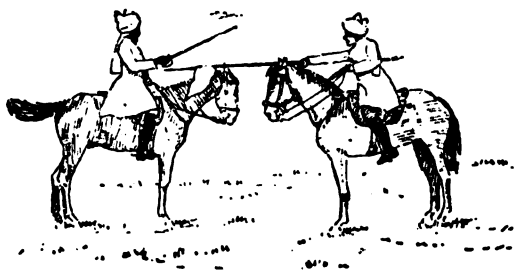


FIG. 5.—THE POINT AT BODY BY LANCE AND THE DOWNWARD AND OUTWARD PARRY BY SWORD.

The 'thrust' comes into play in close fighting, but as the object of this paper is to deal chiefly with principles—and close

fighting cannot be called one of them for a lancer—much need not be said in regard to it. It may however be usefully employed against a swordsman adopting method (2), dodge and pursuit. It is probable, though, that the lancer would not thrust in his first tilt, as he would naturally try for the body or head point, but having discovered his opponent's tactics he might in his second attack change at the last moment his point to a downward thrust on to the back of the ducking swordsman. Fig. 4 illustrates this.

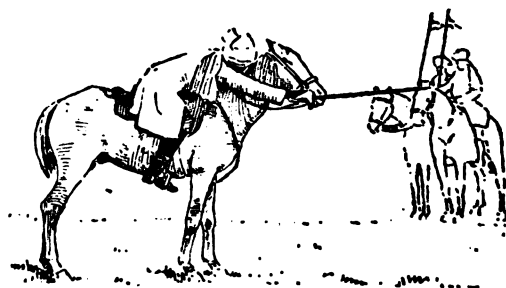


FIG. 6.—SWORD DUCKING AND POINTING.

If the latter, however, pointed as well as ducked, the lancer's thrust would get home too late, if at all (for the 'thrust' has less reach than the sword), so that it is a risky action to adopt.

Handling of the sword (versus lance).—What is the best parry? Riding on lines parallel to the approach of the lancer, perhaps the downward, outward cut is the best, that is a cut made from the position illustrated by fig. 1, the object being to

cut through the lance shaft or to beat it down and out. Fig. 5 hardly shows the outward inclination of the down-coming sword. To merely beat down the lance often results in the point being deviated to one's leg or into the horse's flank.

But this parry is most extraordinarily difficult to bring off against a lancer who knows his business. Practise how you may, you will miss the lance nearly every time. *Experientia docet*. The writer, after daily attempting to cut the lance shaft with this parry and being daily prodded in

the stomach and chest till he was sore all over, arrived at the diagonal advance (a trick of the game doubtless known and used since mounted combat began, but one not generally known nor thought of). This diagonal approach seemed to do away with the need of a parry to save the body, and there remained

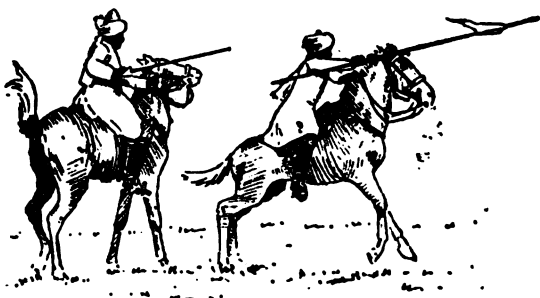


FIG. 8.—LANCE HAS MISSED THE POINT AT SWORD'S HEAD; LATTER IS WHEELING TO PURSUE.

only the defence against the lance point delivered at the head. An upward wrist movement appeared to be the parry for this attack, but too many stunners in the face made its practice, though less difficult than the other,

extremely disagreeable, so that the duck or dodge was tried with considerable success in its place. Probably this latter is no more new than the diagonal approach, but again is sufficiently unknown and untaught for the writer, and probably many others, to be ignorant of it.

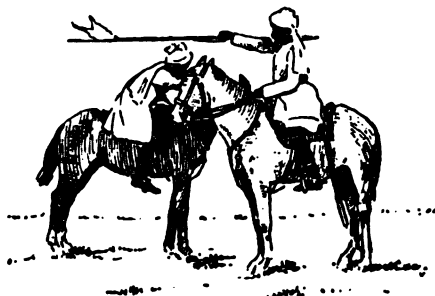


FIG. 7.—LANCE POINTING AT HEAD, SWORDSMAN DUCKING (INADEQUATELY) AND COUNTER-POINTING.

difficult than the other,

SOME NOTES ON THE DESIGN OF RIDING SCHOOLS AND OF STABLES

By BRIGADIER-GENERAL G. K. SCOTT-MONCRIEFF, C.B., C.I.E.

THE following notes are descriptive of riding schools and stables recently built in the United Kingdom. They endeavour to translate into actual practice some of the broad principles of design which experience had shown to be necessary, without going to very great expense. As some of the buildings in question have been finished and are found to be satisfactory, it is probable that they will be utilised as types in future cases, and it is thought therefore that some description, showing the reasons which have governed the designs, may be of interest to the readers of THE CAVALRY JOURNAL.

RIDING SCHOOLS

The old type of riding school, as illustrated by those in the Cavalry barracks at Aldershot, $178\frac{1}{2}$ feet long by $53\frac{1}{2}$ feet wide and 28 feet high, has a good many disadvantages. It is a very costly type to begin with (about £6,000), owing largely to the thick and high walls, and heavy roof. The interior is imperfectly lighted by day, and the high space renders efficient artificial lighting a matter of some difficulty.

The standard plan (which is still the official pattern recognised by authority) is an improvement on this in so far as lighting is concerned. The height of the wall is reduced to 16 feet, but as much window space as possible is given above the level of the boarding at the sides. The interior dimensions are 150 feet by 53 feet 6 inches, and the floor is composed of 6 inches of broken brick over which there are 12 inches of faggots and 12 inches of tan and sawdust. There is a gallery at one end with stores for gear &c. beneath.

The main objections to this type of building are: (1) The position of the gallery, which is not suitably placed for supervision; (2) the material of the floor—tan, on dark winter mornings, has a very cold feeling and disagreeable smell; the faggots sometimes work up through the tan and injure a horse's foot; (3) the expense, the average price of such a building is £4000, due largely to the extent of walls and foundations.

But in spite of these disadvantages this riding school is a good one, light and spacious. For purposes of ordinary instruction it is not intended to alter the dimensions in a future type, though it may be advisable to do so in exceptional cases.

Such an exceptional case occurs at the Cavalry School, Netheravon. There the character of the instruction is such that a large school is necessary and consequently one with about double the floor area of the standard design has been built. The length is 228 feet, and the width 72 feet. The height of the building at the walls is the same as in the standard plan, viz. 16 feet, and there is the same height of sloping boarding at the sides, viz. 6 feet. The width is proportionately less in the Netheravon school than in the standard type, both because the cost of roofs increases very rapidly with the span, and also because a very wide building is difficult to light satisfactorily.

The cost of this building, which is illustrated on plans, was £4400, and as it is more than twice the size of the standard plan, the cost is really about half of the latter.

In the Netheravon school as much of the wall space as possible is taken up for windows, and there is also a line of skylights in the roof. For night-work there are two rows of artificial lights. The illuminant adopted is air gas, a new patent process. The installation for this is contained in a small adjacent building, and the working is extremely simple. The calculated amount of illumination was based on the requirements of instruction on winter mornings. It is sufficient for this purpose, but it is not quite enough for equestrian displays in the evening.

The floor in the Netheravon school is in layers of sand and sawdust, first 4 inches of sand and then 4 inches of both mixed.

This has been tried, as it is in use at Vienna and other places in Austria and favourably reported on by the Military Attaché. Under the sand and sawdust is 12 inches of broken chalk.

At first this floor proved rather heavy, as was to be expected, for any floor of loose materials will be soft when first put down, and a tan floor is certainly no exception to the rule. With use, however, and constant watering the Netheravon floor has become much firmer, and is now all that can be desired, good to work on, good to jump off, clean and sweet. The whole surface has sunk some 3 inches, and under the soft covering of sand and sawdust is now a firm springy bottom of caked sawdust. The writer is of opinion that 6 inches, at most, of mixed sand and sawdust would in future be quite sufficient, and that the broken chalk underneath is unnecessary. A new floor in any case requires a good deal of watering.

A cheap and simple form of riding school has recently been built at Glasgow for £1100. The interior dimensions are 150 feet by 53 feet 6 inches, and the height to the top of the side walls 14 feet. There is the usual 6 feet of guard boarding at the sides, and at a height of 12 feet from the floor there is an open space practically all round the building, $2\frac{1}{2}$ feet high, which admits light and air, without the cost of windows. This opening is protected from rain beating in by a sloping hood of corrugated iron. The floor is made of 18 inches of smith's ashes, with 2 inches of sand above, and then 4 inches of sawdust. Above this again is sawdust and sand mixed, 4 inches thick, in the proportion of 3 sand to 2 sawdust.

Here again the floor is rather too heavy, and probably unnecessarily thick. It is proposed in future cases to reduce the ashes to 12 inches and the covering above to a total of 6 inches of sand and sawdust.

STABLES

Sir F. Fitzwygram in his 'Horses and Stables' recommends that the cubic area allowed to each horse should be at least 1200 cubic feet. He gives various statistics of existing stables,

e.g. the Cavalry barracks at Aldershot 1034 feet, Colchester Cavalry with open roof 1405, ditto with rooms over 1296, Hounslow 630, Norwich and Windsor about 730 &c. The present Barrack Synopsis lays down 1500.

What is even more important than the actual cubic space is the arrangement of the stalls, so that all the horses should get equal advantage of air and light. The arrangements in these particulars in the older patterns of troop stables—*e.g.* those at Aldershot and other Cavalry barracks built more than fifty years ago, and in many private stables in town and country—are very faulty. The best arrangement, unquestionably, is to have the horses stabled with their heads towards the outer walls of the building, and with light admitted from windows at a sufficient height above their heads. These windows should be hinged, horizontally, at the bottom, and in troop stables it is desirable that they should be all opened and shut by means of a horizontal bar and ratchet arrangement worked from the ends. Fresh air can then be admitted without having pulleys and cords in each stall, and without having cold air blowing directly on to the horses' backs.

The drawing of a troop stable which illustrates these notes (see plan) represents a type which has been recently built at Aldershot, and which has been approved of for general adoption. The cubic space is 1500 feet per horse. There is practically a continuous line of windows all along on each wall, sufficiently high on the inner side to be quite clear of the horses' heads, and at the outer side to leave room for a flat-roofed harness-room or a low litter shed, or forage store, about which adjuncts more will be said presently. The inner sides of the walls are plastered with ordinary lime or cement plaster, and then tinted with some colour not too glaring for the horses' eyes.

Outside, the walls are rough cast. The roof trusses are of wood, because iron is apt to corrode with the ammoniacal fumes constantly present in a stable. The trusses are placed at eleven-foot intervals—*i.e.* over every alternate stall partition. They are supported on steel stanchions or pillars, which again are

based on steel plates resting on concrete blocks in the ground. Half-way between each of these stanchions is a lighter one (an angle-iron), similarly founded, whose function it is to carry the ends of two adjacent manger plates and the ends of the stall partitions, or swinging bails in a troop stable, and also to help to support the window frames. Thus all the work of supporting the roof, the windows, and the mangers is done by the steel uprights, which thus form a skeleton, as it were, on which the building is moulded. The walls, therefore, need only be as thick as is required for warmth and dryness. It has been found that a total thickness of six inches (including the rough-cast outside and plaster inside) is quite sufficient to ensure what is required. Outside the stable there are rings fastened to the uprights to which horses can be tethered and groomed outside in fine weather.

The mangers and hayracks rest on steel brackets riveted to the uprights. The old pattern of hayrack, placed above a horse's head, is very objectionable for obvious reasons. Nature has not built a horse to feed with his nose in the air like a giraffe, and consequently he tries, when his hayrack is placed in that position, to pull the hay out through the bars, with the result that much of it is wasted. Nor is the result much better when the hayrack with open bars is placed below his nose, for although in that position he does not get seeds and dust into his eyes, nose, and ears, he does lose a lot of hay through the bars. Similarly the old pattern manger was very unsatisfactory, never properly cleaned, often falling and breaking (being made of cast iron and hanging from small vertical screws which invariably rusted), and with various corners from which the corn was troublesome to extract. In the new pattern manger, which is made of stamped steel shaped like a bowl, the corn naturally tends to fall to the centre and it can be easily removed for cleaning. The hayrack is a somewhat larger bowl, and it has two movable bars across it, so that a horse will not be able with a sudden toss to jerk out the hay from the interior.

The manger plate has a curved bar passing from beneath it into the wall. This bar has on it a sliding ring to which is fastened the chain and head stall of the horse. Thus the rattling 'log' and long chain so fruitful of accidents is dispensed with, and the number of collar-chain galls, injuries from horses cast in stables &c. is reduced.

The partitions in ordinary troop stables are cast-iron bails, hanging from the manger plate at one end and from a heel post at the other end. This heel post is now made $6\frac{1}{2}$ feet above the floor, finished off with a short wooden piece at right angles to the post, and with hooks on which to hang bridles &c. temporarily. The object of the wooden piece is that a saddle or numnah may be temporarily placed there while the horse is being wiped down. There is provision in the harness room for all saddlery, and cleaning should, properly, be carried out there, but necessarily a good deal of a preliminary nature must be done in the stable itself.

The length of the stalls from the wall is 11 feet, which is 6 inches more than Fitzwygram allows. The total width, however, of 30 feet is the same as recommended by him.

The slope of the floor, as recommended also by him, is confined to a small portion, about $3\frac{1}{2}$ feet, at the back part of each stall. The rest of the stall is absolutely level. This enables a horse to stand on the level part with comfort. Usually stable floors are made to slope considerably from front to rear, and sometimes from the sides inwards, the result of which is that in order to relieve themselves from the strain on their hindquarters one generally sees horses in a troop stable with their hind legs in the rear drain or the pavement beyond it.

The material of the floor is the hard Staffordshire brick with grooves on the surface. This is probably the only material that will stand much wear without getting slippery or chipping. Granite concrete is excellent, but it needs far greater care in construction than is usually possible. It has been used in the troop stables at Netheravon, but there were special facilities for supervision in that case.

The provision of a small forage store is very desirable, as by this means two days' supply can be drawn and placed under lock and key outside. But it is important that the forage store should be outside the main building, and not exposed to fumes of dung &c. inside. Also the advantages in case of fire are obvious.

Litter sheds, as usually constructed, are much too high and too shallow. For litter to dry properly in this country the outside of the shed must not be more than 5 feet high. The sheds can be entered from the sides, where, owing to the slope of the roof, the height can be greater. And the shed should be at least 10 feet wide.

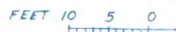
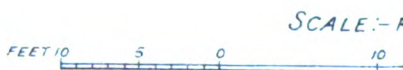
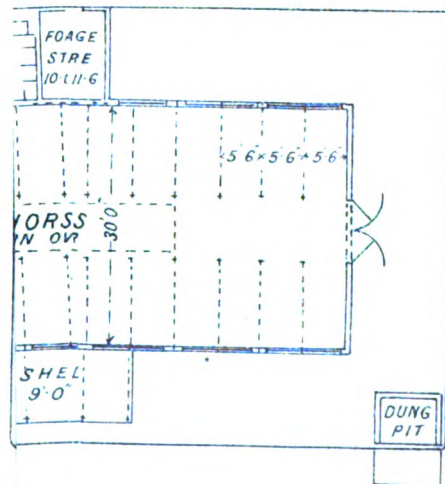
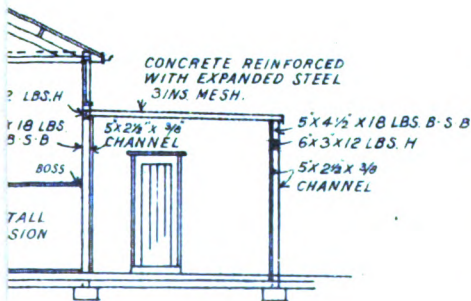
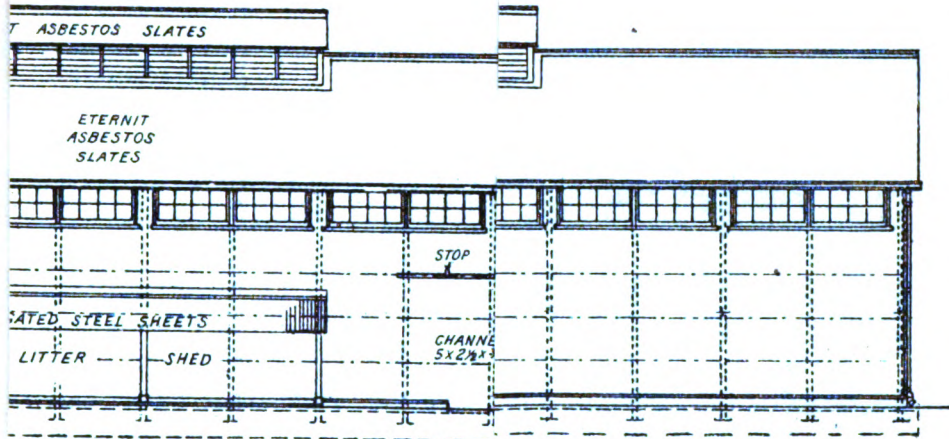
Harness rooms are perhaps a luxury for Cavalry, but for draught horses they are almost a necessity. Certainly the provision of these enables the harness to be kept in a cleaner and more satisfactory condition than if it is hanging on brackets in the stable. Harness rooms should be fitted with small stoves, and it is desirable that they should be large enough to admit of a certain amount of cleaning being done in the room.

The only point in which the Aldershot modern design differs from that advocated by General Fitzwygram is the slope of the roof. It is not thought necessary to give so steep a slope as he recommends. Obviously it depends on the material, certain roof coverings requiring a steeper slope for absolute watertightness than others. With the light artificial slates now commonly used there is no need for a steeper slope than about 1 in 2.

The cost of a troop stable with harness rooms, litter sheds, &c. as in the Aldershot pattern is about £35 per horse. This is considerably cheaper than the older patterns of such stables, which ran to about £60. Those constructed lately cost less than £30, but there was a good deal of sapper labour employed, which brought the cost down. Generally it may be said that while the comfort and wellbeing of the horse has been the first object, and the convenience of men who look after him a good second, the requirements of the public purse had the weight that their importance merits.

ALDE STABLE

THE CAVALRY JOURNAL—No. 18.



THE HORSE SUPPLY OF RUSSIA

By COLONEL G. P. WYNDHAM, M.V.O.

(1) THE NUMBER OF HORSES IN RUSSIA

ONE often hears the boast that Russia is the richest country in horses in the world. As regards quantity it may be that her claim is justified, for the statistics for 1906 prove that the Empire possesses more than thirty million horses, inclusive of seven millions in the governments and provinces of Siberia. But as regards quality the statement calls for careful examination, for these figures without doubt include everything with four legs that can by courtesy be termed a horse. It is as if one were to count every *ekka pony* and *grasscutter's tat* when compiling a census of the horses of India for military purposes.

The above figures include, of course, horses of all ages, but, if one examines the detail of the military horse census for 1905, which deals with sixteen governments only of European Russia, one can form some idea of the proportion that reach the working age annually.

The general total of 9,154,697 is composed as follows :—

Stallions	.	.	.	.	.	245,569
Geldings	.	.	.	.	.	2,846,405
Mares	.	.	.	.	.	2,959,672
Total of working age (five years and over)						6,051,646
Foals	.	.	.	.	.	805,937
Young horses (under four years)	.	.	.	.	.	1,747,297
Four-year-olds	.	.	.	.	.	549,817

Of these 89·8 per cent. are owned by the peasant communities, 8·8 per cent. by landowners and inhabitants of the country, and 1·4 per cent. by inhabitants of towns.

From these figures it appears that in these sixteen governments about 500,000 horses attain the age of five in any one year, and this should be ample to meet all needs if no doubt existed that they were all suited for military purposes. There are indications, however, that the Russian Government find a great difficulty in obtaining a sufficient number of suitable remounts to supply the annual requirements of its troops even in peace time. This is borne out by articles published in the military papers in 1907 by Colonel G. Gusev, President of the Remount Committee of the Astrakhan district. This officer alludes to the great difficulty experienced in obtaining the 10,000 to 11,000 young remounts required annually for the Cavalry, Artillery, and Frontier Guards. He also points out how much greater would be the difficulty of providing the 570,000 horses required in the event of a general mobilization.

A study of the list of the various types of horses at present bred in Russia which is given below, and for the detail of which I am largely indebted to a publication by Colonel Gulkevich, will render it easier to understand how the difficulty arises and will show that, in spite of the exceptional advantages that the Empire enjoys for the breeding of a large number of horses at a moderate cost, well-regulated assistance and careful supervision are necessary to secure a regular supply of animals suited to meet the large military demands.

That this is fully recognized is proved by the facts that for some years the budget has shown an annual increase in the grants for state-aided studs, numerous regulations have been issued to maintain the supply of horses in the Cossack communities, and legislation is being considered to provide fresh suitable ground for the private breeders when they are ousted from their present lands by change of conditions or by termination of leases.

(2) THE IMPERIAL STUDS, STALLION DEPÔTS, AND PRIVATE STUDS

At present there are six Imperial studs for breeding stallions to supply forty stallion depôts, that are distributed over different

parts of the Empire, with sires, the main object being to improve the horse of the country and especially those of the Don region.

Five of the Imperial studs are situated in central Russia, and the sixth in Poland. The Kryenovski stud provides draught horse sires; that at Stryelets sires of Arab blood; the Derkulski and Lanovski (Poland) studs provide thoroughbred English sires, and those at Novo-Aleksandrov and Limarev half-bred sires.

The stallion depôts in European Russia have a total establishment of about 4400 stallions. Taking the total number of horses in European Russia at about 22,000,000, the proportion works out to one government stallion to over 5000 horses. This proportion is considered too small and is held to account for about 90 per cent. of the horses being weak and not higher than fourteen and a half hands. It is intended, therefore, to form eight new depôts and to double the strength of four of the existing ones. This year in Astrakhan a new depôt is to be formed of 100 stallions (75 of these to be purchased abroad), and in the Vyatka government the number of stallions is being increased from 50 to 100.

In the Don country there are numerous private studs for breeding the 'Don' horse (see below). The principal ones are, Mikhailikov, 800 brood mares and 3000 horses; Bezuglov, 400 brood mares and 1500 horses; Pochapaev, 700 brood mares and 3000 horses; and those at Pichvanov, Shronov, and Korolkov. Outside of the Don country there are many private studs at which thoroughbreds are reared, of which the best are found in Poland. The Don country and the Caucasus find more than half of the horses for the army, from 7000 to 8000 a year.

As a rule the horses are brought up in complete liberty, running free on the steppes under the supervision of guards.

(3) THE VARIOUS TYPES OF RUSSIAN HORSES

I. EUROPEAN RUSSIA

(a) *The Peasant Horse*.—The majority of the horses (18,000,000 at least) can be classed as the peasant horse. The type, spread over such a vast area, naturally varies according to local conditions. It is descended from the steppe horse and is very small, its height being only from thirteen to fourteen hands. Many are still smaller, and probably only about a sixth of the total number exceed fourteen hands. It is used for the somewhat primitive methods of agriculture, and subsists by grazing in summer, whilst in winter it is usually given straw as fodder. It is obviously not suited for military purposes except for occasional use as improvised transport, and then only in the small local carts to which it is accustomed.

(b) *The Russian Cart-horse (Bitiug)*.—The Bitiug is the result of cross-breeding between the peasant mares and Dutch and Danish sires, started so far back as the time of Peter the Great in the government of Voronej. Further crossing with the peasant horse has caused the term Bitiug to be less distinctive, and the genuine Bitiug is said to have been almost extinct in 1882. The name is still applied to cart-horses of good bone, while the less satisfactory animals are simply termed 'heavy cart-horses' or 'big peasant horses.' The principal centres of cart-horse breeding are still Voronej and Tambov, the best known being the peasant stud at the village of Shukavka, in the former district. The deterioration of the heavy draught horse is attributed to the peasants lacking sufficient pasture ground as well as to the need of fresh blood. The Bitiug averages 15.3 to 16 hands and can draw 5400 lb. or more. They are sometimes as high as 16.2½. The peasants of Voronej, Tambov, Penza, and of other governments with suitable soil have lately been taking active measures to improve the breed of cart-horse, stallions of the Clydesdale type being preferred. The government stud authorities are also paying particular attention to assisting them by providing suitable draught-horse sires to travel these districts.

(c) *The Orlov Trotter or Russian Race-horse*.—In Russia the Trotter is considered a distinctive Russian product. The breed was originated by Count Orlov-Chesmenski by crossing Arab sires with English, Dutch, and Danish mares. The horses run from 15.1 to 16.8 hands in height and are spoken of as belonging to the light or heavy type, the former being used for racing. Amongst the Imperial studs Trotters are chiefly bred at that of Khryenov in the Voronej government. The private studs, though they may breed all kinds, naturally prefer the light Trotter, as it commands the best price. Perhaps trotting races as a sport do not much appeal to the Englishman, nor would they appear to be the most suitable from a military point of view. They are, however, most popular in Russia, and meetings take place weekly for a great part of the year near many of the larger towns. There is no doubt that the breeding of the Trotter has so far had greater influence than any other measures taken for the amelioration of the small native horse.

(d) *The Orlov and Rostopchin Saddle horse*.—At the end of the eighteenth and commencement of the nineteenth centuries the breeds of Counts Orlov and Rostopchin became well known. The former was descended from carefully selected Arab and English sires, the latter from a crossing of Arab sires with English thoroughbred mares. In 1845 both studs were purchased by the Crown. Specially selected sires and mares of the Orlov stud were placed aside to preserve the distinctive breed, whilst the others were used for crossing with the Rostopchin breed and with horses of English blood bred in Russia. Measures, such as entering them in a stud-book, have been taken to preserve the Orlov-Rostopchin breed of saddle-horse. It is considered particularly good for reproducing the characteristics of its stock in cross-breeding.

(e) *The Don Horse*.—The 'old type' was the result of crossing of local breeds, that is of the Tartar and the Caucasian horse. In height only from 14 to 14.3 hands, these horses are noted for their endurance, but the 'old type' is disappearing and the 'new type' becoming prevalent owing to the continued crossing of the local horse with thoroughbred and halfbred

stallions of Arab and English blood. The result is an increase in height, 14.8 to 16 hands, but, it is said, a possible diminution in staying power. Besides providing the horses for the Don Cossacks, the Don studs provide annually 3000 to 4000 remounts, and consequently form one of the principal sources for mounting the Cavalry.

(f) *The Half-bred Saddle Horse*.—This horse is the result of crossing the local mare with Arab or English stallions. Height up to 16.2½ hands. They are bred in the Imperial studs of Novo-Aleksandrov, Stryelets, and Limarev. Of the private studs those of the Don are the most developed for rearing half-bred horses, but others are scattered over the vast extent of New Russia, Little Russia, and the south-western and southern parts of Great Russia.

(g) *The Stryelets Horse*.—Bred in the Stryelets government stud. As a rule this stud does not produce pure-bred Arabs, but Arab blood greatly preponderates. The typical Stryelets horse has been produced by the crossing of Arab or eastern blood with English or Orlov-Rostopchin blood. In appearance it resembles a three-quarter Arab and is a good stayer. Average height, 15 hands. Prevalent colour, grey.

(h) *The Pure-bred Arab*.—The pure Arab is bred only at the Derkulski Imperial stud in the government of Kharkov, also at some private studs to provide sires for their own cross-breeding purposes. Height, 14 to 15.1 hands. A Russian stud-book is kept for Arabs. They are liked for the little attention they need when young, and are considered with a good selection of mares to produce suitable cavalry and even draught horses.

(i) *The English Thoroughbred*.—The sire of pure English blood is considered the best for stud purposes and they are now bred in the Imperial studs of Derkulski in the Kharkov government and Lanovski in the Syedlets government, also in private studs for the purpose of crossing with other breeds, more especially in Poland and the south of Russia. Height from 14.3 to 16.3.

(k) *The Jmud Horse*.—A more or less distinctive type of small Northern horse. Strong and hardy. Height from 13 to 14.3. Prevalent colour, chestnut with white mane and tail. Formerly they were bred all over north-western Russia, and are supposed to come originally from crossing the local horses with the 'kleper' (pony) of the Baltic Provinces. They are now practically confined to the government of Kovno and number about 100,000.

(l) *The Baltic or Esthonian Kleper (pony)*.—A hardy and strong little animal bred in Esthonia and on the islands of Dago and Oesel. Tradition says that the breed is descended from the crossing of local mares with Arab sires brought by German crusaders to Germany and thence to Livonia. Ordinary height, 13 to 13.2. Those that are higher than 14 hands are called Double Klepers. The number of thoroughbred Klepers is decreasing, owing to the poverty of the Esthonian peasant and careless breeding, but the government subsidises two studs to preserve the breed. The principal one is on the island of Oesel, on which island there are about 16,000 horses. Some people advocate the use of this breed for the improvement of the peasant horse.

(m) *The Finnish Horse*.—The Finnish horse is probably only a variety of the Baltic Kleper, but is somewhat taller, 14 to 15.1 hands. It is used chiefly for agricultural work, and for vehicles for hire in the towns. It is not fit for Cavalry, and consequently of little use to the army.

(n) *The Vyatka Horse*.—Average height, 13 hands. It is considered a more or less distinctive type of the Northern horse and is the result of crossing the local horse with the Baltic Province pony in the time of Peter the Great, and in later times with Finnish blood.

(o) *The Kirgiz Horse*.—Is of Mongolian origin, having been brought to Siberia by the Kirgiz amongst the hordes of Ghengiz Khan. They are ugly, but inured to every hardship, and in spite of being poorly fed will cover about 70 miles at a stretch at

a rate of between five to ten miles an hour. They are not fully developed till eight or nine years old, but it is common for them to be still working at twenty. Height, 12.3 to 14 hands; occasionally, but seldom, they reach 14.2½. They are used chiefly as saddle horses by the Kirgiz themselves, and by the Orenburg and Ural Cossacks. They are bred on the steppes of the government of Orenburg and in the provinces of Turgai, Akmolinsk, Semipalatinsk, and Semirychia, and number about seven million.

(p) *The Kalmuk Horse*.—Is bred on the Kalmuk steppes to the N.W. of the Caspian Sea. Owing to the scarcity of forage, the Kalmuk horse is not so numerous as the Kirgiz, but is strong, a good stayer, and a good doer. Height, 14.1 to 15, a few of them reaching 15.3. The nomad Kalmuks in the government of Astrakhan possess about 108,000 of these horses, and they are used for both the regular and irregular Cavalry.

(q) *The Bashkir Horse*.—Bred in the northern part of the Orenburg government and in those of Ufa, Samara, and Kazan; it is descended from the Kirgiz horse, but the type has slightly changed owing to local conditions. The highland bred Bashkir averages 12.3 to 14, and the lowland bred Bashkir 13 to 14.1½ hands. They are chiefly used for harness work, but the highland breed is very compact and makes an excellent pack animal.

(r) *The Ural Horse*.—There are two varieties, the 'Uralian Kirgiz' and the 'Uralian Cossack.' The former does not differ from the Kirgiz horse, but the latter has been improved by a more careful selection of sires, and averages in height from 13.2 to 14.2, a considerable number reaching 15 hands.

II. THE CAUCASUS

(a) *The Nogai Horse*.—A variety of the Caucasian breed possessed by the nomad tribes that number about 20,000 souls along the shores of the Caspian. Average height, 14 hands. Bred for centuries free on the steppes, they are inured to extreme heat and cold and have remarkable staying power. The Karanogai horse-breeders possess about 14,000 horses, but they

are not much bought for the army, for it is said that with change of food they lose their good qualities, grow lazy, and do not acclimatize well.

(b) *The Karabakh Horse*.—A variety of the Caucasian horse. It resembles a well-bred Arabian or Persian horse and is probably a descendant from these crossed with the Turcoman horse. Height, 14 to 14.8 hands. There are few thoroughbred Karabakh horses left, but they are still bred at a few private studs in the government of Elizabetpol. They are delicate and do not acclimatize easily, and are therefore only used for the army when crossed with English blood.

(c) *The Kabarda Horse*.—A variety of the Caucasian horse. Height, 13 to 14 hands. Excellent for mountain work, and a cross with English blood would probably produce a good Cavalry horse. There are many other varieties of the Caucasian horse, but the Kabarda is the most distinctive and the most widely spread. They are bought for the Caucasian brigades of the frontier guards, for the mountain artillery, and for the Kuban and Terek Cossacks.

III. TURKESTAN

(a) *The Turcoman-Téké Horse*.—Descended from the old Turcoman and Arabian stock, it resembles more an English horse and is from 14.3 to 16 hands high. It is bred in the Tedjent, Merv, and Askhabad districts of Trans-Caspia, and is stabled and clothed from its youth, an unusual thing for Russian horses. It is an excellent mount over the sandy steppes, but is considered not to stand well sudden changes in temperature and is therefore bought only for the Cavalry of the south.

(b) *The Turcoman-Yumud Horse*.—Bred in small droves by the Yumud tribe in South-West Trans-Caspia, it more resembles the Arabian type. Height, 14 to 15.1 hands. Prevalent colour, grey.

(c) *The Karabair Horse*.—The result of cross-breeding between Kirgiz mares and Turcoman and Arabian sires. It is

bred in large numbers all along the south-western part of the Sir-Darya, Samarkand, and Bukhara provinces and is mainly used locally. Height, 14.1 to 15 hands.

(d) *The Kirgiz Mountain Horse*.—Bred in droves of about 3,000 near the centre of the Sir-Darya River, along the slopes of the Alexander Mountains, and in the province of Semirychia. Maximum height, 14.2½ hands. Hardy and good stayers.

IV. SIBERIA

(a) *The Tomsk Horse*.—The result of cross-breeding of Russian with Kirgiz and Kalmuk horses. Ugly, but strong. Height, 14.3 to 15.1, a few reaching 16 hands. It is useful for Artillery, but unsuited for Cavalry remounts.

(b) *The Urman Horse*.—Bred in the forest district of Urmani in the Tomsk government, it has good bone and short legs and is probably the best Siberian draught horse.

(c) *The Charish Horse*.—Bred by peasants along the River Charish, it is the result of crossing the Tomsk horse with the Kirgiz and Kalmuk breeds. Height, 13 to 14.3. There are many similar types in Siberia and they are used for mountain artillery, baggage animals, mounted infantry detachments of volunteers and orderlies, and for the frontier guards of Siberia.

(d) *The Altai Highland Horse*.—Bred in the droves of the nomadic Kalmuks who roam the valleys of the Altai Mountains. Ugly and coarse, but strong and good stayers. Inured to hardship and scanty food, they can cover long distances in all weathers, and are good for mountain artillery, baggage, mounted infantry, etc. Average height, 14 hands.

(e) *The Amur Horse*.—Bred by the Amur Cossacks in droves of ten to twenty, they resemble the Manchurian horse, whose descendants they probably are. Though their average height is only 13.2, they are capital little beasts for a journey. A Cossack officer, Lieutenant Peshkov, rode his Amur horse 'Serko' from the town of Blagovyeshchensk to St. Petersburg, a distance of 5492 miles, in 193 days. 'Serko,' whose height is

only thirteen hands, arrived perfectly fit and sound and is now in the Imperial stables at Tsarskoe Selo.

(4) THE PURCHASE OF REMOUNTS FOR THE CAVALRY

The government studs do not supply remounts direct to the army, but, as has been shown, they retain sufficient of the best stallions and brood mares that have attained the age of three to four years for their own stock and send the remainder of the stallions to the different dépôts all over the country, at which private owners may on payment have their mares covered. The horses and mares not required as above are sold at public auction and many of these are acquired by the army for remounts. A lieutenant-general holds the office of 'Inspector of Remounts and Cavalry Dépôts' and has a staff of two major-generals, an adjutant, and eleven colonels, these last being the Presidents of the Cavalry Remount Commissions for purchase of horses in the districts of Warsaw, Kiev, Elisabetgrad, Poltava, Kharkov, Tambov, western Don steppes, eastern Don steppes, Nijegorod, Astrakhan, and northern Caucasia. The Commissions purchase the remounts at the latter end of September and commencement of October and may average the following prices :—

	£	s.	d.
Well-bred saddle horses for Cavalry and Artillery	40	18	0
Well-bred draught horses for Artillery.	37	4	0
Trained steppe horses (saddle, draught, and pack)	18	12	0
Unbroken Don and Kalmuk horses for Cavalry and Artillery	14	11	0
Unbroken Astrakhan steppe horses for Cavalry and Artillery	18	0	0

In Siberia saddle and draught horses for Artillery average £21 4s., and pack horses for Mountain Artillery £13 6s.

As soon as purchased the horses (generally rising five) are sent to the Cavalry dépôts and are allotted to squadrons according to colour.

GASTON, MARQUIS DE GALLIFFET

IN the recent death of General de Galliffet, the soldiers of France, and perhaps, in view of the connection of the deceased officer with our troops in the Crimea, we may venture in all sympathy to add, the soldiers of England, mourn the loss of one of the most distinguished of their comrades.

De Galliffet belonged to one of the old noble families of France, but, determined to owe nothing to mere interest, he enlisted, in April 1848, at the age of 18, in the 1st Hussars. Passing quickly through the grades of corporal and sergeant, he was a sub-lieutenant at three and twenty and a general officer at forty—a rapidity of promotion unparalleled since the days of the First Empire. De Galliffet's first commission was in the Guides de la Garde, but this corps did not form part of the expeditionary force ordered to the Crimea, and when that war broke out he moved heaven and earth to be sent to the front, and was fortunate enough to be placed on the staff of General Bosquet, who found congenial employment for him in the Right Attack. On June 15, 1855, de Galliffet was twice wounded, but did not return himself as such, although one of these wounds—a bayonet thrust in the right hand—troubled him for the rest of his life. He was mentioned in despatches and at the close of the campaign was appointed *chevalier* of the Legion of Honour. In 1859 he was transferred from the Guides to the Spahis, but when Napoleon III took the field against Giulai, de Galliffet succeeded in getting appointed aide-de-camp to General Felix Douay, commanding a brigade in the Second Division of the I Corps. At the close of the war in Italy he enjoyed a very brief period of service in Algeria, and was then attached to the Imperial Household, but was permitted to join the force ordered to Mexico in 1862. In this campaign the young captain of Spahis

performed prodigies of valour, but at the siege of Puebla he received a terrible wound to which a man with less determination and vitality must inevitably have succumbed.

By the explosion of a shell he was horribly wounded in the stomach and was left on the ground for dead. When the moon rose he recovered consciousness and found that his entrails were protruding from the grisly wound ; but gathering them up in his *képi* the intrepid Frenchman crawled on all fours to the dressing-tent, where he arrived bearing his dreadful burden more dead than alive. He made a marvellous recovery, and was sent home with captured trophies to the Emperor, who appointed de Galliffet his aide-de-camp, with the rank of Lieutenant-Colonel.

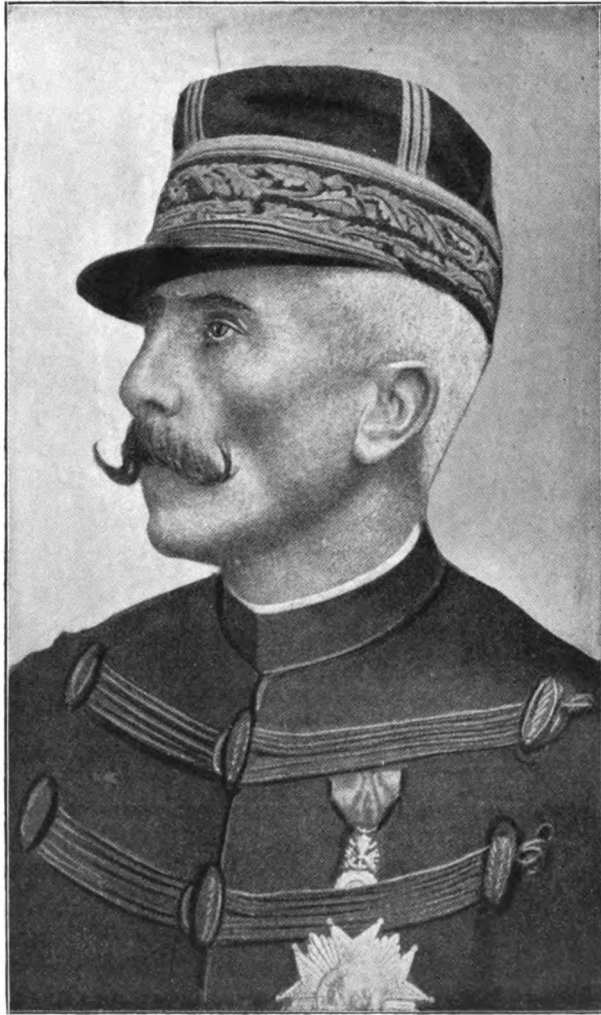
In spite of his wound de Galliffet was able to return to Mexico before the close of the war and greatly distinguished himself at Orizaba and Medellin. Returning to France, he was appointed to the command of the 3rd Chasseurs d'Afrique, with the rank of Colonel, and on the declaration of war against Prussia his regiment was conveyed to France and formed with the 1st and 4th Chasseurs d'Afrique one of the brigades of Margueritte's Cavalry division, attached to the Châlons army. On the eve of the day of disaster at Sedan de Galliffet was appointed to the command of the Brigade, and on the fall of Margueritte, on September 1, he assumed command of the division, which he led in repeated desperate charges against the XI Corps. That day de Galliffet was a truly heroic figure, and no one in the armies of France did more than he to dispel the clouds which were gathering round the eagles. His reply to General Ducrot is historic. Ducrot rode up to de Galliffet as he returned, his following thinned from the charge, and begged for 'encore un effort,' to which de Galliffet cheerily responded—'Tant que vous voudrez, mon général ! Tant qu'il en restera un !' and, gathering the shattered fragments of squadrons which remained to him, he charged again, shouting 'Vive l'Empereur !'

General de Galliffet was involved in the great surrender of Sedan, and only returned to France from imprisonment in

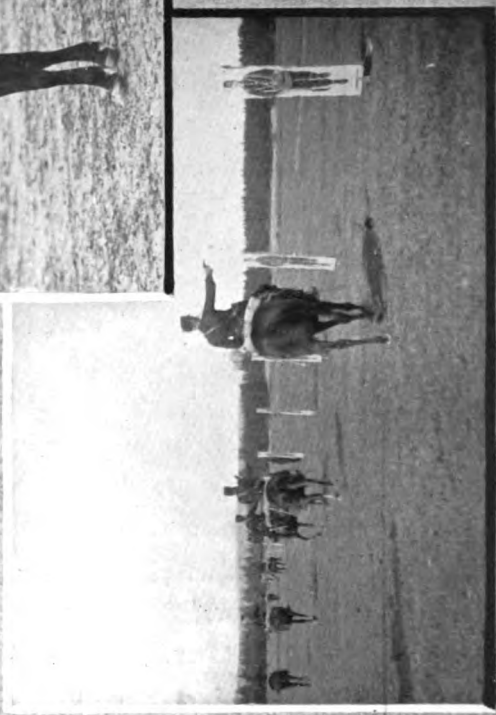
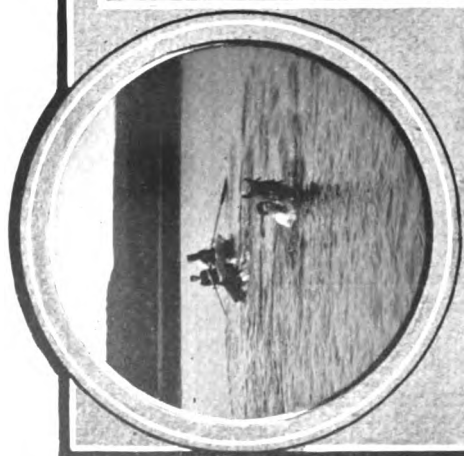
Germany to witness the horrors of the Commune. He was at once nominated by Thiers to the command of a brigade of the Versailles troops, and assisted greatly in the suppression of the Revolution, being awarded much undeserved obloquy for a severity which was necessitated by the unusual and dreadful circumstances of the time. For his unquestionable services he was offered the cross of a commander of the Legion of Honour, but to his undying credit refused all recompense for services rendered against his fellow-countrymen. He had served his country nobly in war; he was now to show what he could do for her during peace. His family was Royalist, he himself had taken service under the Empire, and it was thought that he would now ally himself with one or other of the parties in the State; but de Galliffet was above everything else a soldier of *France*, and to him it seemed that his duty lay clear before him—not merely to abstain from opposition to the new government, but to give it all the assistance in his power in re-establishing order, and in re-organising the army in readiness for that which Gambetta, his chief, enjoined all ‘*d’y penser toujours, mais de n’en parler jamais.*’

His next appointment was as commandant of the corps d’armée at Tours, coupled with that of president of the Cavalry Committee, which latter appointment he held until he entered the War Council. It is perhaps even yet too early to appreciate all that he did for the renaissance of the French Cavalry, but it has been said that if this arm was *re-established* in its darkest days by du Barail, it was *electrified* by de Galliffet. He was seventy years of age when offered, by Waldeck-Rousseau, the portfolio of Minister of War, and it fell to him to finally settle the notorious ‘*Affaire.*’

The young days of the Marquis remind one of those of the heroes of Charles Lever—filled with the romance of love and war; his later life was given wholly to France, and he never for one moment turned aside from the straight path of his duty towards her, while he was permitted to serve her almost to the end. De Galliffet is no more; he has joined the *Grande Armée*.



THE LATE
GENERAL DE GALLIFFET.



NORWEGIAN CAVALRY

*Photographs by
Captain Grøttum.*

THE NORWEGIAN CAVALRY: ITS ORGANISATION, EQUIPMENT, AND WORK

By Captain GRÖTTUM, *Commander of the Staff Squadron of the Cavalry Brigade* *

It is a necessary consequence of the geographical position and topographical nature of Norway that the Cavalry should only form a small portion of the forces of the State. The proportion of this arm can, therefore, hardly be compared with that of other countries in Europe where the military forces are raised by conscription.

In winter the operations and mobility of the Cavalry would, of course, be much more confined than in summer, but even then the mobility of that arm would, in many parts of the country, be impeded by wild and impassable mountains and dangerous moors. It is not too much to say that in the middle of the winter, when snowstorms rage, it would be quite impossible for even a small body of Cavalry to move otherwise than by the main roads. With the Infantry, on the other hand, it would be quite the opposite, since most of them are equipped with skis by means of which not only single men but bodies of troops are able to march at an astonishing speed almost in any direction. In fact when the fiords and rivers are frozen there is nothing to hinder their movements.

* Captain Gröttum, who was present at last year's Cavalry Divisional Manœuvres and was in 1905 attached to the 8th Hussars for four months, will be well known to many Cavalry officers here. He was also the Secretary of the Parliamentary Military Committee on the Norwegian Army during the working out of the new organisation.—Eps., *C.J.*

The special character of the country, and the impossibility of using Cavalry in large bodies, make us regard patrolling, reconnoitring and reporting as its main duties. I should say that Cavalry in Norway would very seldom find an opportunity of directly intervening in the battle. With the limited means at present at our disposal we regard it as more advisable to keep up a comparatively large force of Infantry rather than increase the establishment of Cavalry. But in view of the size of the country and the many passages where it would be not only difficult, but impossible, for our cyclists to pass it would no doubt be better to establish a larger Cavalry force.

It seems, however, of little use at present to impress upon the Parliament the necessity of increasing the mounted arm, as the parliamentary majority reply 'We cannot afford it.' We nevertheless use every opportunity of repeating the old and always impressive saying: 'Every nation that will exist as an independent one must always find means to keep up a sufficient defence to maintain its rights and duties.'

ORGANISATION

According to the present organisation, the Cavalry establishment consists of three corps which correspond with regiments in other armies, namely 'Akershusske,' 'Oplandske' and 'Trondhjemske,' each of them formed in three squadrons of Line, three of Landwehr, and three of Landsturm. Thus the whole force forms a Cavalry brigade of eighteen field squadrons and nine Landsturm squadrons. The Landsturm squadrons are supposed to be used for local defence and as guards of ports and fortresses in war time. We have not at present a sufficient number of broken horses for them and they would therefore in warfare be used as Infantry.

It is probably known to the readers of the CAVALRY JOURNAL that we have been working out a new army organisation, the military committee of Parliament, together with a special committee appointed by the Government, having put forward a

scheme. After long deliberation, the new Cavalry organisation has now been settled, and, generally speaking, on the following lines :—

Two large regiments in the southern portion of the country, namely, that south of Dovre mountains, each of which will consist of six squadrons, and one regiment for the northern portion, namely, that north of Dovre, consisting of four squadrons.

This force will represent the Cavalry of the active army. Besides this there is to be an establishment of eight squadrons of Landwehr Cavalry which are to be mounted on registered horses. It will obviously be preferable to provide horses for these eight Landwehr squadrons than to organise them as Infantry. It seems to be bad economy to train men as Cavalrymen and then use them in war time as Infantrymen.

The squadron establishment will be :

1 captain.

1 second in command, a first lieutenant.

2 second lieutenants ('varnpligtige' or citizen soldiers who have passed a one-year's course at the military college).

1 squadron sergeant major.

1 sergeant major.

4 sergeants.

2 sergeants (citizen soldiers who have passed through a complete course at the non-commissioned officers' school, but who have not obtained commissions).

2 corporals (lance corporals).

4 corporals (citizen soldiers who have passed through the non-commissioned officers' school), as well as the following, all of whom are citizen soldiers :

2 trumpeters.

100 privates.

4 pioneers and telephonic operators.

4 servants.

1 medical officer.

1 veterinary officer.

- 1 medical corporal.
- 4 ambulance corps men.
- 2 farriers.
- 1 saddler.
- 1 shoemaker.
- 1 tailor.
- 1 cook.
- 7 drivers for the wagons.

In addition to the above-mentioned squadrons, five mitrailleuse sections will be established which will correspond with the five units into which the Cavalry will be divided in field operations. There will be five units instead of three, since the two regiments Oplandske and Akershusske, each of six squadrons, will in war time be divided into two smaller regiments each of three squadrons. The Cavalry units will thus correspond with the five combined Infantry brigades.

Each mitrailleuse section is to have the following establishment :

- 1 captain.
- 1 second lieutenant (a citizen soldier).
- 2 sergeants.
- 2 sergeants (citizen soldiers), as well as the following, all of whom are citizen soldiers :
- 12 privates (gunners).
- 12 privates to lead the pack horses.
- 2 privates to hold the officers' horses.
- 1 artificer (gunsmith).
- 5 drivers.
- 1 cook.

The five cycle companies which exist in our army will in the future probably act more in unison with the Cavalry in peace time as regards training and field operations so as to bring about closer co-operation in war.

A question closely connected with the organisation is the obligatory time of service. While the men now begin their

recruit training at the age of twenty-three, there is an increasing opinion that it would be more reasonable to start it at an earlier age. The authorities are inclined to regard the age of twenty-one as a favourable one, because the earlier the training begins so much the less will soldiering interfere with the men's career.

EQUIPMENT

The Cavalry is armed with the Krag-Jorgensen carbine. Calibre 6.5 mm. (side magazine for 5 cartridges). The weight of the carbine is 3.16 kg. A sword weighing 1.73 kg. is attached to the saddle. The officers and non-commissioned officers are armed with revolvers (weight 1.40 kg.) and a sword (weight 1.10 kg. including the scabbard).

Contrary to the regulation in the British Army, our soldiers carry the carbine on the back by a strap around the left shoulder and under their right arm.

In spite possibly of some little drawbacks I should say that the way in which the British Cavalry carry their rifle in a bucket fastened to the saddle is much more convenient for the men as well as more handy.

Our new model of Cavalry saddle (model '98), fitted with the tree, girths, straps, stirrups and everything complete, weighs 7.25 kg. (14½ lb.). We have a saddle blanket (weight 1.20 kg.) and a reserve blanket of leather covered with a woollen blanket. For daily work the saddle is used without blankets, the trees being already covered with blanket material.

Two wallets for the day's ration for the horse and a pair of reserve wallets are fastened on the front of the saddle. At the back of the saddle the two saddlebags, in which the soldier carries the following necessities :

One pair of light boots for camp, one flannel shirt, one pair of stockings, one pair of drawers, one light coat for use in camp, some toilet articles, brushes, one small kettle for cooking the food, one reserve ration, the rest of the day's ration, grooming materials.

Packed upon the saddlebags is the quarter part of a tent besides a peg. Four men form a tent body, each of which carry a quarter part of the complete tent.

HORSES

Before describing in detail the special training of the horses it may be as well to give an outline of our system for providing military horses. The Government enter into an agreement with a certain number of farmers, who are willing to keep a military horse of a special class. These farmers when buying horses at market or elsewhere do so on the distinct understanding that they must pass as fit for service. The horses are submitted for examination to a commission, consisting of the chief of the regiment, a veterinary officer, and two men appointed by the civil authorities from among some farmers selected and voted for by those farmers who keep military horses. This commission has the right of accepting or refusing the horses which are brought before them.

For keeping a military horse the farmer gets from the Government Kr. 100, about £5. 12s., a year and Kr. 1 (1s. 1½d.) a day when the horse is called out either for the remount, recruit or regimental course or on mobilisation or field work—that is to say, for any service. The horse is broken in at a special remount course which lasts for three months. If the horse on return from service is either sick or lame, the farmer receives by way of compensation Kr. 1.80 (2s.) a day in addition to veterinary inspection and medicine for as long as the horse is not fit for use. The veterinary officer decides when the horse is sound and can be used. If the horse has been killed or destroyed when called out for service or has suffered such damage that he will be declared unfit for service, the farmer gets a compensation for it according to the fixed value when enrolled and to the number of years during which the horse has been enrolled. As a matter of fact this is according to its age, as horses must be of a certain age when first enrolled.

When the horses are called out for military purposes they are inspected by a commission consisting of the squadron commander, a veterinary officer, and two men selected by the farmers themselves. The veterinary officer makes his remarks, which are put down in a book and signed by the members of the commission. The same thing takes place when the horses are returned to the farmers. In this way disputes between the farmers and military authorities are usually avoided, but if a dispute arises as to the cause and time of an incurable sickness or damage, then it is always settled in a way which does justice to the farmer.

Since horses often have to go six months or more without any military training it is evident that some little time will elapse between the time when they are called up and the time when they are again fit for service in the ranks. The recruits have to do their first course at the same time, and those movements therefore are chosen which give instruction in riding and at the same time bring the horses themselves once more into training.

THE RECRUIT TRAINING

In the first year of his obligatory course, which begins at the age of 23, the cavalry recruit has to go through a course of 102 days' training from the beginning of May till the middle of August. After this they have to pass through the regimental course of 24 days. Thus their training for the first year consists of 126 days.

According to the now existing regulations the recruits go through a regimental course in the second and third year and after entering the Landwehr in the seventh and eighth. Each of those regimental courses occupies 24 days.

Immediately after the recruits' arrival at the training ground a commission of medical officers is established to make inquiries as to the men's fitness for service. Although such an inquiry has been made when the men are called in at the so-called 'Session' at the age of 22 for the purpose of drawing lots and being detailed to the different arms of the service, it is necessary

to repeat this examination at the beginning of the recruiting course in case there may have been a great change in a man's medical condition in the interval.

The recruits come either direct from their districts to the training ground or they have to meet at the special squadron dépôts, where they are equipped and sent in a body by railway or steamboat to the training ground.

While the above-mentioned examinations are being made the men are supplied with uniform, arms, and equipment for themselves and saddlery for their horses.

The medical commission as a rule finishes its inquiries on the first day, and by the second day full training has begun.

It sometimes happens, however, that the actual training, which is supposed to begin on May 1, is delayed by bad weather. This year, for instance, there was something like three feet of snow on Gardermoen, and actual training did not begin till May 5. Under such circumstances the work of the first few days simply consists of marches on the main road. As a rule, however, the ordinary programme, which is planned out beforehand by the recruit course leader, is carried out at once. This programme has to be approved by the Colonel of the regiment, but is usually somewhat as follows :

5-6 A.M.	Stable duties, feeding, watering and grooming the horses.
6-7	First breakfast, consisting of coffee, bread and butter.
7-8.30	Riding.
8.30-9.30	Watering and feeding horses. Second breakfast, consisting of milk, bread and butter.
9.30-11.30	Gymnastics, marching, drill at arms, etc.
11.30-12	Watering and feeding horses.
12	Dinner, consisting of meat (fresh and salt), or fish with some kind of soup.
2.30-4 P.M.	Riding.

- 4-5 P.M. Coffee, bread and butter.
5-6.30 Drill, skill at arms, preparatory exercises for firing, etc.
6.30-7 Stable duties. Feeding, watering, grooming, etc.

Great attention is paid during the first few days to the riding of the recruits, everything being done to make the instruction both interesting and encouraging. The majority of them have never been on a horse before, or at any rate have never had any instruction in Cavalry riding. Stirrups are used for the first few days and then blankets are substituted for saddles.

Though some difference of opinion exists as to the benefits derived by the use of the blanket, there are at least two points in its favour, namely—men unaccustomed to riding are not so inclined to get stiff or sore; and secondly, men riding in a saddle are much more inclined to keep a rigid or inelastic seat than when riding on blankets, because the movements of the horse are more plainly felt under a blanket both when trotting and galloping, and men therefore learn more readily how to sit in order to let the particular muscles in use have full play.

Since it is of special importance that the recruit should understand the necessity of riding as easily as possible on his horse, it follows that everything depends on the resource, patience, and interest shown by the instructors. They must never miss a fault nor tire of correcting one. The secret in being a good instructor lies in the fact of his observing the particular faults of each recruit, and of his finding out the best and readiest way of correcting them. Not only that, but instructors must always be prepared to illustrate their point. This is usually much more effective than rigmaroles of explanation.

The work of the first few days is often interspersed with intervals during which there are lectures on the anatomy of the horse, the peculiarities of a horse's action when a rider is on its back, and the best way to sit a horse under all circumstances.

Personally, however, I think that we are too apt to explain things and too little inclined to illustrate points by actual demonstration.

As mentioned before, the necessity for improving the horse's qualities for Cavalry use is not overlooked during the training of the recruit. All the exercises therefore are chosen with this object in view.

The training staff of each regiment consists of a Captain with two or three Lieutenants and ten or eleven N.C.O.'s, thus giving one instructor to about twelve or thirteen recruits. Each of these squads forms what we call a 'volte.' In order to neutralise the difference in the capability and effectiveness of the various instructors those on duty for teaching riding are changed every other week.

So that the best use may be made of the short time which is available for training, the recruits on the way from the barracks to the training ground or *vice versa* are either asked some questions in connection with their duty or given some task to perform. For instance, they may be told to give an exact description of all the people they meet on the way, their clothing, etc., and to judge by their appearance what class of people they are. This plan brings into play and develops their intelligence, observation powers and judgment, all qualities which are very useful to a Cavalryman in modern warfare.

As soon as the recruits have reached a certain standard, the instructor orders them separately to ride a certain distance, say 400, 500, or 600 metres, absolutely straight to a given landmark. When they reach this point they have to turn once to the right and once to the left and then take a straight line back to the instructor. Later on, the distance is increased and the order varied, perhaps to trot one part of the way and gallop another. This sort of exercise is considered a most useful lesson for marching in squadrons and larger bodies.

It is not too much to say that the whole secret in getting an evolution correctly performed is that each rider should be able to

maintain a uniform pace and keep the right direction. Hence each rider must be trained individually to ride by himself and be dependent solely on himself without any necessity to cling to the file on either side of him, a very common failing.

The following are the main principles which we think should be followed in training recruits :

(1) Give him confidence and self-reliance by gradually developing his balance, so that he may ultimately be able to ride without any assistance from the reins or stirrups. At first the recruit will naturally try to hold on by the reins, therefore the reins should be fixed to the girth or the saddle, and the man ordered to let his hands hang down at his side.

(2) So that he may learn to ride independently and bring his intelligence into full play, give him special tasks as soon as possible, as, for instance, to ride to indicated landmarks by different routes, and at different paces.

(3) Never cease impressing on the recruit that the main object to attain is complete harmony between the horse and the rider. He must ride lightly in the saddle and his body above the hips should be perfectly supple.

(4) Great stress must be laid upon the art of exercising the horse in its various paces and to go collectedly at these paces.

(5) Jumping is regarded as a very important part of the training. The horses are first led over the obstacle by the men, and then the men ride over without using their reins. This is as much to give the men self-confidence as to avoid giving the horse a sore mouth. For the first few times the recruits are allowed to hold on to the saddle or the crest.

(6) Great care is taken in keeping up a regular and uniform pace. For this reason the recruits are supplied with watches, and have to keep on traversing marked-out distances at a fixed time until they have acquired a knowledge of pace.

To teach recruits to keep their balance favourable results have been obtained by the following plan. A good recruit is placed at the head of each instruction squad, and riding with

his reins, this man keeps the stated pace along the marked track. All the other horses of the squad are tied together with a pair of reins so that they are bound to keep the correct distance from each other and follow the first horse. In order that the horses' mouths may not be spoilt, the men are not allowed to touch the reins until they have learnt to keep their balance. The same rule applies, as I have already explained, when instruction is being given on jumping, but the reins in this case are merely knotted and rest on the horse's neck, while the men are allowed, if necessary, to grasp the saddle or the crest.

The qualities of each individual recruit are studied so that the best way may be found of bringing him up to the standard. To enable this to be done in the short space of time at our command, the more advanced and intelligent recruits assist in training those of their comrades who are backward in any particular subject.

Great stress is laid on the instruction in all subjects being clear, progressive and individual.

It is impossible, of course, within the limits of an article to describe in detail every exercise which we have for training recruits even in the short space of 102 days, or to deal with our training in musketry, signalling and field work. I have merely given an outline of some of their work.

I do not pretend that there is anything very new in this, but I give it as an example of how a small nation devoted to its country tries in a short period of training to prepare itself to defend its rights and homes.

Before closing this article I should like to say how indebted I am to English officers for some of the most charming and interesting days of my life.

THE SQUADRON SYSTEM OF TRAINING REMOUNTS IN THE INDIAN CAVALRY

By MAJOR F. G. H. DAVIES, 'Q.O.' *Corps of Guides*

As the above system has been tried for the last two or three years in my regiment and has been considered a success, I propose now to give a short account of it.

When the squadron system of training remounts was first mooted, the ideas of squadron commanders were called for and there was some diversity of opinion as to its advisability. In spite of this, however, it was resolved to give it a trial, and the results of the first year were so encouraging that those who opposed it originally were won over and are now firm adherents of the system.

The reasons urged in its favour are :

1. It falls in with the present ideas of decentralisation. Those who are responsible for the care of the horse in his stable and for his further training in the ranks are the proper persons to superintend his original breaking-in ; for they can best adjust feed to work, and work to condition, age, state of health and constitution.

2. The system implies that all officers, British and Native, must qualify themselves to train remounts (instead of only the Adjutant and Wurdi Major) and so increase their individual efficiency, and stimulate their interest in, and knowledge of, their horses.

3. The Adjutant, in these days of large numbers of recruits and necessity for higher efficiency, has not the time to devote to the training of remounts.

4. The more intimate supervision in squadrons minimises perfunctoriness in training.

The reasons which might be urged against it are :

1. That the Squadron Commander has not time in the drill season.

2. Want of uniformity in training ; and possibly

3. Varying degrees of natural aptitude among squadron commanders.

As regards the first objection : a Squadron Commander has one or two squadron officers and four native officers under him, all of whom he can instruct on his own lines ; there are, therefore, at least six people in each squadron to carry on the work.

During the hot weather when leave is open and the temperature and paucity of men preclude much work outside cantonments, remount training can proceed regularly, concurrently with musketry, and the squadron officers can divide their time between those two branches. The remounts should join in the early spring or at the end of the drill season, so that the majority of them can be passed into the ranks before the next drill season begins. Any odd horses which through sickness or other causes are left over can be easily arranged for. The other objections are met by the part taken by the O.C. in the matter, as will appear further on.

The system is as follows :

Remounts, both walers and country-breds from the regimental farm, join in the spring, the walers at four to six years of age as obtainable, the latter at four off, and the majority are passed into the ranks in the following November.

They are issued to men considered fit to train them themselves—a stimulus to young soldiers to so qualify themselves—and are ridden daily including Thursdays, Sunday being the only day off: they get one long, or two short, lessons a day at the will of the Squadron Commander. The course of training is divided into progressive classes : to insure uniformity there is a syllabus of work for each class. Class IV. (the commencement)

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consists of long reining by the expert regimental staff under the O.C. and Adjutant, and not till they are passed out of this are the horses handed over to the Squadron Commander. The above is necessitated by the difficulty and expense of keeping up separate establishments of expert men and gear in squadrons: the men are specially trained at remount depôts.

The Squadron Commander then passes each horse from class to class till they are fit to bring before the O.C. to be passed into the ranks. Before inspecting a batch of horses the O.C. expects the Squadron Commander to have ridden each horse and to have satisfied himself that they are in every way fitted for the ranks.

Each horse is examined individually and marked for certain exercises, as well as collectively in the troop. Subsequently those passed remounts with the highest marks are further examined and ridden by the O.C. for regimental prizes, which are awarded to their trainers.

The syllabus of obligatory exercises for each class enables the Squadron Commander, or his subordinates, to make out a rough daily programme and insure that nothing is omitted or forgotten, but it is not intended to tie him down or prevent him exercising his own ingenuity.


As will be seen, the system implies that no expert staff of rough riders is kept up, except two or three for long reining; but that every man is encouraged to train his own horse as far as possible of his own initiative, not perfunctorily by word of command. Thus the N.C.O. in charge of each class only superintends and gives advice and assistance during individual work, but takes command for collective drill. The British and Native officers act as inspectors, and are continually examining and riding individual horses to test their progress, and to enable them to point out to the riders any points wherein their horses are deficient, while the O.C. frequently inspects and compares the progress of the remounts of different squadrons.

During the absence of a horse's owner on leave, another man is permanently detailed to ride the horse, and it is claimed that

in this way a number of men annually get a refresher in schooling and in the application of the aids, and that the standard of equitation of the regiment is automatically raised.

Trained remounts are not allowed to attend manœuvres till they are turned five, or to be used for tent-pegging till they are six. Their further training in the ranks for another year is watched in the same way as in the case of recruits, by making their riders wear a distinctive head-dress at squadron parades.

Squadron commanders keep up a record of the attendances of each horse throughout his training.

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RECENT PUBLICATIONS

‘The Story of the Household Cavalry.’ By Captain Sir George Arthur, Bart., late 2nd Life Guards. Two volumes. (Constable.)

‘The Story of the Household Cavalry’ is a work of great merit, lavishly got up, with excellent illustrations. Commencing from the restoration of the Monarchy, 1661, it traces the ‘King’s Guard’ onwards to the present time. The history of the regiments of Household Cavalry and the part they played during this period is given in great detail, and must be carefully read to be thoroughly appreciated. The book is in many ways a record of the British Army during these long years, with the particular history of the Household Cavalry carefully depicted. It shows the privileged and proud position enjoyed by all ranks, from the ‘private gentlemen’ in the ranks to the officer commanding. Perhaps the most critical time constitutionally was when the various troops of Life Guards were dispersed to different localities from the metropolis by William IV. The Life Guards were settled into their present form of two regiments in 1788, and 30 years later the Household Cavalry received the addition of the Royal Horse Guards (Blue) with all the privileges and rank of Household Cavalry, thus making the three regiments as today. Full information is given of the significance of the military grades, the equipment, the parsimony and peculation, and the irregularities of pay known as off reckonings, which characterised army administration during this period. The vicissitudes of these regiments are closely bound up and entwined with the Monarchy, and as such shared the fierce light that beat upon the throne during this history-making epoch. The Household Cavalry did not escape the see-saw system of increase and rapid decrease applied with such prejudicial effect to the rest of the Army. In 1748 we find the Life Guards reduced from four troops to two, and after the campaign of 1762 the Blues were reduced from fifty-two to twenty-nine men per troop. The Royal Proclamation of June 8, 1788, is of interest, absorbing the Horse Grenadiers and bringing about the formation of the whole corps into two regiments of Life Guards. It is interesting to note that there were no N.C.O.’s or Warrant Officers before 1756, when the important change was made by their institution. We find in 1797 the pay of the corporals raised to 2s. 6½d. and that of troopers to 1s. 11½d. In 1799 it is interesting to note a sixth troop was added to each regiment of Life Guards, and in 1803 we find the regimental establishment again increased. The next increase was apparently in 1812, when reinforcements were required for the Peninsula—each of the regiments of Life Guards was augmented from eight to ten troops, and the regiment of Horse Guards from six troops to eight. It was not till 1814 that an order was issued that the Blues, when brigaded with the Life Guards, were to be considered as one corps or brigade, and from George IV.’s reign they shared the London duties

in rotation with the other two regiments of Household Cavalry. It is interesting to note, when so many distinguished Scotsmen have seen service in the Household Cavalry, that a fourth troop of Horse Guards was raised in Scotland in 1661. There is an interesting chapter on Silver Stick and Field Officer, and a passage of constitutional interest shows the direct intervention of the Crown at Parliamentary elections by political pressure being brought to bear on private soldiers as voters. 'I've apprised Lord Delawarr to have the Horse and Grenadier Guards privately spoken to for their votes—they have a large number of votes' (George III. to Lord North, 1774). We see the tendency to poll in favour of the ministerial candidate; direct intervention thus working on the fertile soil that always exists where Government servants are concerned.

There is a little distinction in the privileges of the Life Guards and Blues, the former reporting direct to the Sovereign, the latter to the Commander-in-Chief. The book is brought up to date by an admirable account of the part played by the Household Cavalry in Egypt and Soudan, and last, but not least, in South Africa. An excellent speech in defence of the Household Cavalry, by Captain the Hon. R. Talbot in the House of Commons in 1871 is worthy of notice, marshalling as it does with conclusive force the unassailable position they had reason to hold amongst the soldiers of the King. The book cannot fail to be of interest to the students of military history, and the Household Cavalry in particular. It is provided with an excellent index, and let those who desire a grip of the long period covered by its pages, read it.

'Some Historical Records of the West Kent (Q.O.) Yeomanry, 1794-1909.' By Lieut.-Colonel J. F. Edmeades, M.V.O. (Andrew Melrose, London.) Price 5s.

This is, besides being well illustrated, a very readable book for those who are interested in the Yeomanry. It gives a very good outline of the work which some of the older regiments have had to perform during the 110 years or more of their existence. Raised in the first instance in almost independent troops, which were at a later date brought together as regiments, they were called on to form the Cavalry of the second line during the Napoleonic period, and as such, though never actually engaged on active service, played a most useful part. As showing how great was the expectation of an invasion by Napoleon, we read that some of the Kent troops were on one occasion actually turned out to repel a reported landing on the Kentish coast. As instancing the variety of their work, we see that they were on several occasions called on to assist in the suppression of riots, and at one time in the quelling of a mutiny on some war ships at the Nore.

Coming to the period of the South African War, the 36th Company Imperial Yeomanry was formed by men from the regiment and others connected with West Kent. There is a good account of their fighting. The description, which is illustrated by two maps and some excellent photographs, includes a great part of the work of the Eighth and Colonial Divisions, as well as the battle of Biddulphsberg and the interesting operations which on the S. and S.W. side led up to the surrounding of the Brandwater Basin and the largest surrender of the war.

The last portion of the book gives a brief outline of the gradual evolution of the Yeomanry from the period of the War to the present day—a time of great change. 1899 saw a corps with small numbers carrying out with great

precision the march past and other unwarlike evolutions ; 1909 a full regiment with a large waiting list, practising for a considerable portion of their training movements which are likely to fit it for what it is intended.

The book ends with the warning that if the greatest military nation in Europe considers that it takes at least three years to make a cavalryman, all Yeomen must see how essential it is to make the very most of such opportunities for training as are now at their disposal.

'German Official Account of the Russo-Japanese War—The Battle of Liao-yan.' Authorised translation by Karl von Donat. (Hugh Rees.) 10s. 6d. net.

'The will to conquer, conquered. It is this which makes the battle of Liao-yan so prominent a feature in the whole war. It is vain if people attempt to diminish its importance by pointing to the small material gains obtained by the Japanese. This severe contest has not become prominent by the losses the defeated party sustained in standards and guns, but it has become prominent by the terrible loss of *morale* the Russian Army suffered on the banks of the Tai-tse-ho. The knowledge that Kouropatkin, in spite of the numerical superiority of his troops, failed to turn the fortune of battle in his favour on a field he himself had selected and improved with every modern technical appliance, reacted unfavourably on the conduct of the future operations of the Russians. It deprived from the outset the 'great' offensive afterwards of all its vigour, and altogether during the last phase of the campaign, when the Commander-in-Chief had united in his hand seventeen army corps, gave rise to no other thoughts than mere defence. It was not at Mukden and Tsushima that the Russians lost the campaign ; they lost it already at Liao-yan.'

Thus the German General Staff sums up the results of the five days' battle round Liao-yan.

The account of the dispositions on both sides and of the fighting is clear, and well illustrated by the usual excellent maps.

The first chapter deals with Kouropatkin's preparation of his position, and with Oyama's first directions for the attack.

Chapter II. describes the attacks of the 2nd and 4th Armies against the Russian right wing on August 30 and 31, which eventually resulted in the withdrawal of Stackelberg's command within the works of the Liao-yan Bridge-head, and the occupation by the Japanese of the abandoned outer position.

Chapter III. deals with the attacks of the 10th Division of the 4th (Nodzu's) Army and the Guard Division of Kuroki's Army against the Russian left centre on August 30, and describes Kuroki's bold resolve to cross the Taitse River with his 12th and half his 2nd Divisions, and outflank the Russian left.

Chapter IV. describes in detail Kuroki's operations on the right bank of the Taitse ; the capture of the Man-ju-yama hill by the Okasaki Brigade on September 1 ; the desperate attempts of the Russians to retake it on September 2 ; and Kouropatkin's resolve on September 3 to retreat on Mukden, Kuroki's exhausted troops remaining on the defensive on the right bank of the Taitse.

Chapter V. returns to the combat of the 2nd and 4th Armies round the southern fortifications of Liao-yan City, September 1-3.

Chapter VI. describes the retreat of the Russians behind the line of the

Shaho, under cover of the 17th and 1st Siberian Army Corps, unpursued by the exhausted Japanese.

Then follow the usual pithy comments, which may be summarised in few words as follows :

Having rightly decided to fight a decisive battle at Liao-yan, the Russian General should have made offensive action his chief object, rather than the protection of Liao-yan City and his communications with Mukden.

Marshal Oyama, on the other hand, is considered to have failed justly to appreciate the situation on September 1, when, instead of attacking the inner works south of Liao-yan, he might have recognised the possibility of supporting Kuroki's turning movement north of the Taitse, and so gained decisive results.

'It is the uncertainty which almost always surrounds the commander on the battlefield which makes the conduct of operations so difficult: it is the light of subsequent information which makes the critic's task so easy,' said a marshal of France.

'The one thing certain in war is,' says von Moltke, 'the amount of will power and energy the Commander-in-Chief himself is endowed with,' and herein the Japanese commanders triumphed.

'The Strategy of the Russo-Japanese War.' By Brevet-Major W. D. Bird, D.S.O., late Professor at the Indian Staff College. (Hugh Rees.) 4s. 6d. net.

This work begins with a careful summary of the geographical and political factors of the situation, the events which led up to the war, and the organisation of the opposing forces; then follows the narrative in outline of the land operations up to and including the battle of Mukden, illustrated by a number of diagrams showing the successive positions of the Russian army corps and the Japanese divisions.

This narrative is interspersed with the author's comments and conclusions, which, based doubtless upon imperfect information, are certainly open to argument.

As a clear summary, and as calling attention to the main strategical factors, Major Bird's work is most valuable, and should certainly prove useful to students of this campaign.

'The Strategy of the Franco-German War.' By Brevet-Major W. D. Bird, D.S.O., late Professor at the Indian Staff College. (Hugh Rees.) 6s. net.

This book contains a series of excellent lectures delivered by the author at the Staff College, Quetta. The facts are taken from the official accounts of the war, and the narrative and comments have been clearly and carefully arranged.

The action of both sides is lucidly explained and accounted for with the aid of diagrams which give side by side the *supposed* and the *actual* positions of the opposing armies, so that at each point it is shown why the commanders came to certain decisions, and their consequences.

Major Bird's system is so good, so clear, and saves such an infinity of labour to the student, that his work will be hailed with gratitude by the many English readers of the Franco-German war. It is only to be hoped

that he will not stop with the battle of Sedan, which ends this book, but will go on to the later phases of the 'People's War,' which is of such peculiar interest to English readers at the present time.

'France and Germany from 1871 to 1906.' By Victor Meynier. (Swan Sonnenschein & Co.) 2s.

This small book claims to give the true history of the relations between Germany and France from the Peace of Frankfort to the Algeciras Conference—the story of a grasping, ruthless, bullying Germany and a dignified, reluctantly yielding France. There is an interesting account of von Moltke's alleged desire to renew hostilities in 1875, when France began the reorganisation of her shattered forces. The Marshal is reported to have said: 'It is in vain for France to protest; I only consider facts; when a nation reorganises its army it is with the intention of making war. Therefore we have the right to anticipate that war by attacking France before she is ready; only allow eighteen months to elapse and you will see the Eastern French frontier bristling with armaments containing an artillery equal or perhaps superior to our own. The question at hand is to know whether we wish to lose 100,000 men now, or in two years to sacrifice 500,000 men, and lose the advantage of our victories? Whatever may be the point of view in which we place ourselves, military, political, and even Christian, you will conclude that an immediate war is necessary.'

'Modern Riding.' By Major Noel Birch, R.H.A. (William Clowes & Son.)

This work may be described as concise, clear, and very much to the point, and Major Birch is to be congratulated on producing a work which will prove invaluable to soldiers (and we include Imperial Yeomanry) and civilians alike.

The average Britisher is prone to think that horsemanship is inherent in him, and that he has little or nothing to learn from study in this science. By all means let horsemanship remain a sport in the eyes of the Britisher, but the better the sport, the more it is worth study and practice.

Why were the English polo players unable to hold a candle to the American team of 1909? Simply because they did not 'go in for' the study and possibilities of the game—they were behind the times. So it is with horsemanship.

Our riders can go across country or between the flags better than any others, but it is our own game, and there is no outside competition. If there were, the pride of place might receive a knock, as in polo.

We want a little more science in our horsemanship, whatever our calling.

In this small work, which is delightfully easy reading, Major Birch offers us an appetiser at which no 'sportsman' need turn his nose up.

To soldiers it is of special interest, and though we may not agree in all points with the author, the principles are undeniably sound, and the whole study of horsemanship, riding and training alike, is gone into clearly, simply and well.

The work is one which every officer of the mounted branches of our army ought surely to possess and study, and which civilian horsemen too will do well to read.

The *Militärische Presse* of July 28 is responsible for the following: 'The experiments with Cavalry uniforms are now completed, but as is well known experiments were also carried out in regard to the provision of a new armament,

especially in relation to the side-arm, which is similar to that carried by the Infantry. A regiment of Hussars of the Guard was directed to make trial of three different patterns of bayonet, and of these one of medium length has been approved. It is rather shorter than the Infantry weapon, is carried in a flat steel sheath or scabbard, attached to a frog on the waistbelt. The new Cavalry carbine will be carried on the rider's back, protected by a leathern case from injury by accident or weather. The sword is to be retained, so that the new bayonet will be entirely an *extra* weapon. The new service uniform is to be of a grey, not grey-green, material. So far as the various patterns of Cavalry head-dress are concerned these will all be retained, but either a cover will be provided on field service or they will be composed of a neutral-tinted material which will not be distinguishable at a distance. Bandoliers have been rejected as being too conspicuous, and ammunition will be carried in five pouches worn on the brown leather belt; two pouches, each containing ten rounds, will be worn in front on either side, and one in rear containing fifteen rounds, or a total of *sixty-five* rounds per man. Lace is done away with, and boots will be of brown leather.'

Kavalleristische Monatshefte.—Few of the articles in the June number are of general interest, but there is one by Major Emmanuel on 'The Divisional Cavalry, its Strength, Employment and Effectiveness,' which will repay perusal if not containing any specially novel ideas or reasons. The writer compares the Cavalry organisation of different armies and comes to the conclusion that from three to four squadrons is accepted generally as the normal strength of the divisional Cavalry. The latest German Field Service Manual having definitely apportioned the duties of the strategic and the divisional Cavalries as those of strategic and tactical reconnaissance and protection respectively, Major Emmanuel lays down that the Divisional Cavalry must aim at the closest possible co-operation with the other arms and especially with the Infantry; that there is wide scope for initiative on the part of the Divisional Cavalry commander; that during peace training it is not sufficient that only during the manœuvre period of the year should Cavalry act with Infantry, but that no operations whatever, whether of a battalion or of any larger body, should ever take place without the attachment of a Cavalry force of proportionate strength, and that, moreover, the body thus employed should frequently be relieved by others of the same arm, so that *all* may acquire the experience necessary for the proper performance of the duties of Divisional Cavalry; special care must be taken that this body should neither actually be nor should represent more than the correct proportion of the strength laid down; and the author further insists that the duties of a Divisional Cavalry commander demand qualities at least as high as those of one destined to play a possibly more independent rôle. Then follows an account of the work carried on at the newly-opened Cavalry School at Paderborn, and a very short paper on the remount question in Switzerland.

For the months of July and August there is a combined number, and among the more interesting of its contents is a paper descriptive of the Cavalry pursuit under Murat after the battles of Jena and Auerstedt. While admitting the extraordinary results achieved by the Imperial Cavalry of France, the author sets out to show that Murat's handling of the force placed at his disposal was by no means flawless, and that his success was gained at the cost of his Cavalry, which

would seem after the operations to have practically ceased to exist, in spite of the arrangements previously made by the Emperor for ensuring the systematic replacement of men and horses, and in spite, moreover, of the large number of remounts, amounting to over 16,000, obtained from the surrenders in the field, and the capitulation of towns and fortresses. The Cavalry horses suffered but little in action; on the other hand, the marches during the six weeks the campaign lasted were very severe. In a paper on 'The Attack on Infantry by Cavalry and its Influence on the result of the Battle,' the writer describes the action of Cavalry at Custozza and at Vionville, and comes to the conclusion that in spite of the greatly enhanced power of the modern rifle, a Cavalry which is willing to accept heavy losses may still seriously affect the issue of an action and even of a campaign; but that the mere attack upon Infantry, with no especial result in view, is not worth laming a single horse over. This number also contains an article on 'Divisional Cavalry,' and while none of these perhaps convey any new teachings, they tend to show how important is its rôle in war—an importance too which is not easy to gauge or realise in peace manœuvres, since then more Cavalry is usually allotted to divisions than would be the case on actual mobilisation, from the wish to accustom as many mounted units as possible to co-operate with the other two arms. The writer seems to think that commanders of divisions are inclined rather to over-estimate the powers of offence of their Divisional Cavalry, and to expect too much of them in this respect, and for this reason among others he would have us guard against the tendency to increase the strength of the Divisional Cavalry—a tendency against which Prince Friedrich Karl, Pelet-Narbonne, de Galliffet, Schmidt, and other Cavalry experts have uttered repeated warnings. There is a paper on 'The Roumanian Cavalry,' and one urging a plea for a bayonet for the Cavalry carbine, while in another which follows, on 'The Employment of Cavalry by Night,' the need for the provision of this extra weapon is again emphasised. Among the shorter papers are two on distance rides, one on 'Moon Blindness among Horses,' and a third which suggests the employment of a newly-devised picketing gear as a rather unpractical means of piling arms in the bivouac or even for use as a rifle rest.

The September number opens with an interesting account, by Major Kerchnawe, of the Cavalry operations in the battles of Aspern and Wagram. The writer points out that the tremendous losses suffered by the Cavalry of either belligerent in both battles have been often accepted as a proof of the uselessness of the Cavalry attack in either action, but he urges that the losses, great as they undoubtedly were—the eleven regiments of French cuirassiers had 3000 casualties out of a total strength of 6600—are not to be considered as in vain when it is remembered that they were caused by repeated charges upon unbroken Infantry and when too the important results are borne in mind to which the Cavalry so materially assisted. Then follows a very generous appreciation of the life and services of the late General de Galliffet, to whom full credit is given for his brilliant leadership of the French Cavalry in war and for his exertions for the maintenance of the highest standard of efficiency and discipline at all times. A not generally known story is told relative to his opinion of the harm done to the mounted arm by the introduction of two years' service; he was remarking one day that were it left to him to form an army, he would take the rank and file from Turkey and his officers from Prussia. 'What then,' he was asked, 'would you

take from the French army?' 'J'en prendrais la musique,' was the reply.—Major General von Fritsch writes on Gefechtsaufklärung, and points out that although theoretically a very simple duty, it is in reality full of difficulties and pitfalls; he lays very great stress upon the all-importance of getting through any information obtained.—Among the short articles in this number is one which enumerates the British thoroughbred stallions now standing in Government studs in Germany; there are no less than 210, which the writer considers is far too small a number! And in a brief history of the German remount, it is stated that up to 1790 the Prussian army purchased all its Cavalry horses from other countries and only obtained its Artillery remounts in Prussia. It is stated in an extract from a French veterinary journal that it has been found by experiment that flies can be practically driven away from stables by painting the walls blue, a colour to which these pests have a great objection—whether from æsthetic reasons or because there is something to them deleterious in the mixture—11 lb. powdered chalk, 1½ lb. ultramarine, and ½ gallon water—is not stated.

Militär-Wochenblatt.—There is not very much of Cavalry interest to be found in the pages of this Journal during the three months under review, but the following may be mentioned. The number for August 21 contains a very curious order drawn up in the year 1546, prior to the outbreak of what is called the *Schmalkaldischer Krieg*, by the Kurfürst John Frederick for the guidance and government of mounted troops. It is divided into one-and-twenty paragraphs, and is concerned with the pay of the men and horses, the periods for which engaged, the replacement of casualties, transport and supply, and other matters for which the regulations in the present day are contained in several bulky volumes. If rough and ready, it seems complete enough. There are two stipulations which have a mediæval tone: during the period of engagement all private animosities are to be held in abeyance, and while the men are to be paid every fourteen days whenever possible, they are not to consider themselves as released from their engagement if from any unforeseen circumstances their fortnightly dole is not forthcoming. The rules for the division of booty or for the amount received as ransom for prisoners is, however, calculated on quite modern lines—the sum assigned to John Frederick being on a lordly scale compared with that allotted to a mere *Reiter*. These old-time principles are still observed in the distribution of the batta of modern days! In the number dated September 7 there is a paper by General Arent, wherein he treats of second-line Cavalry, and of a possible two-year period of service with the active army for regular Cavalry; there is perhaps not much in his paper which does not repeat many of the old arguments in opposition to the two-year period of service which one has read before in many other articles by German officers; but there is just one remark made by the General which may be of interest and even of significance in view of the discussion which has recently raged in certain of the daily papers round the question of whether the British Yeomanry should or should not be armed with the sword. General Arent compares the Yeomanry which was employed by us in South Africa with the Swiss Cavalry, and comes to the conclusion that the former should have been far more useful than the latter under the same conditions, because our men were infinitely better mounted and rode very much better. He blames us for turning them into mere Mounted Infantry, and winds up with the remark, 'finally their swords were taken away,

when of course their fate was sealed!' A short paper in the issue for September 11 forms a contribution to the literature on the vexed question of 'Point or Cut,' and it is herein remarked that while there can be only one pattern of *thrust*, there are two descriptions of *cut*, the heavy, downward cut of the British or German Dragoon, and the drawing, backward cut of the native swordsman; the effective cut, opines the writer, is only really possible with a very curved sabre, like those employed by the Hussars of Frederick the Great.

Revue de Cavalerie.—The numbers for the quarter under review are of rather more than ordinary interest, although in several of the articles contained in them there may be traced a vein of melancholy, and almost of despair, in regard to the present position and future prospects of the mounted arm in France. Lieut. Vasseur, of the 2nd Chasseurs d'Afrique, states that, contrary to what is usually supposed to be the case, Cavalry are rarely required to charge in the many actions which have taken place on the soil of northern Africa: that the *service de sûreté éloignée* is entrusted to the native corps and that of *exploration ou de découverte* is effected by means of spies or through the department of native affairs: and that the action of the Cavalry proper has almost invariably been by fire. The need for machine guns to augment the fire of dismounted cavalrymen has already been recognised, but the guns sent to the theatre of war were all mounted on wheels, and it was found that such were unable to accompany the Cavalry across country or into the hills where no roads existed. Lieut. Vasseur then formulates a scheme for the provision of pack machine guns, which should, he considers, be organised in sections of two guns with 8,400 rounds at their disposal. The complete 'outfit' would weigh 600 kilos. and would be carried by ten pack horses, which would thus each carry, including saddles, two days' forage, picketing gear, etc., a weight of some 90 kilos or about 200 lbs. The *personnel* is taken at, per section, one officer, one N.C.O. and twenty-three gunners and drivers, all mounted. The extracts from the records of the 15th Chasseurs cheval in 1814–15 are continued. In this number there appears the first portion of a paper entitled *La cavalerie, hier et aujourd'hui*, wherein the writer reviews with regret the tremendous efforts made after the war of 1870 for the resuscitation of the French Cavalry, which resulted in its attaining in 1876 a degree of efficiency which made it one of the first in Europe. He then recapitulates all the mistakes which have followed, both in the training and the methods of employment of this arm; after laying down that *équitation et tir sont deux genres de sports qui n'ont rien d'incompatible*, he states that the musketry of the Cavalry is by no means all that it might be, and that what is especially required is an efficient class of musketry instructors. Naturally the law of two years' service meets with his severest disapprobation, in that it robs the ranks of the *professional* element which he considers indispensable for Cavalry and Artillery. In the second portion of this article, continued in the succeeding number, the writer makes complaint that the Cavalry of France has not yet decided as to the methods of its employment in the field; that the leaders of the arm are divided into two camps, each having opposing views. He then formulates his own views for Cavalry employment and pleads for new regulations for his arm based on those published in 1876, which were, he declares, the best ever issued. In another paper in the May-June number the management of the *Revue* recapitulate all the reforms which have been suggested in its pages during the last three

years; while in yet a third paper another writer calls for increased simplicity of manœuvre and training as a means to the attainment of more uniformity. The May-June number closes with a highly interesting and hitherto unpublished letter from Captain Pajol to Marshal Soult, dated Borodino, September 15, 1841, and giving the impressions gained on the spot as to the causes of Napoleon's demi-victory many years previously.

The July number opens with a very fine appreciation of the military career of the late General de Galliffet, that Paladin of the Second Empire. There is a weighty criticism of the new German Cavalry regulations, and there are some suggestions for the manœuvre in the field of small bodies of light Cavalry.

Spectateur Militaire.—There is not much of interest to the mounted arm in the last quarter's numbers of this periodical, but in view of the importance attached in France to the proposal for extending the principle of universal military service to Algeria, a paper by Colonel Sainte-Chapelle is worth reading by Englishmen, whose experience of making soldiers of the men of semi-civilised races is only approached by that of French officers. The article in question, which is entitled 'La conscription des indigènes musulmans en Algérie,' commences in the issue dated June 1 and ends with that of August 1. The circumstances which took the French to Algeria in the first instance are briefly reviewed, and the local corps which have from time to time been there raised are enumerated and described, while the writer also points out how easy it has ever been to obtain recruits for the different regiments which have been raised as required, and recounts with pride the services which these corps have rendered in the French colonies, in the Crimea and during the war of 1870. At the same time he finds in the proposal to supplement the armed Forces of the Republic by the enforcement of universal military service on *des mercenaires et des vaincus, non civilisés*, something wholly unacceptable from the sentimental and material point of view. As a matter of sentiment Colonel Sainte-Chapelle would seem to object to the reinforcement by mercenaries of alien race of the purely French armies, compromised *par la diminution de la natalité française*, for something of the same idea which led us at the outbreak of the South African War to decide against the employment therein of any of the units of our Indian army; but he objects also to the proposal for the somewhat fanciful reason that whatever the system of recruitment suggested for the men of military age in Algeria it could not be identical with that which is in force in France, but would have to be founded upon that which obtains in Tunis, and which is one rather of conscription than of universal military service. Conscription, however, cannot, he contends, be imposed legitimately upon one who is not admitted to all civil and political rights. But perhaps the most potent objections put forward by the writer against the enforcement of universal service or conscription among the Mussalmans of Algeria, are to be found in the difficulty and expense which the administration of the scheme would entail. Incidentally it is interesting to note that Colonel Sainte-Chapelle in discussing the question of the maintenance of the French colonial or overseas army, finds the need for a distinct and separate force of this character *not*, as do our advisers in England, in the mere existence of a system of compulsory service, but solely in the brevity of the period (two years) to which such service is limited.

PROBLEM No. 8—RESULT

THE Editor has received thirty-five solutions of this Problem, many of them good.

The Field Glasses have been awarded to LANCE-CORPORAL E. FRASER, 'C' Squadron, 3rd Dragoon Guards, whose solution is given below.

Solutions— *Problem 'A.'—Preparations and time of start*

Warn a corporal, two signallers, and eleven men to have their horses tied on one end of the line, and sleep together, so that there will be no trouble in finding them in the morning.

See that signalling equipment is complete, and shoeing, etc., all right.

Warn the cook to have breakfast for the party at 3.15 A.M., and have a good feed ready for the horses. Draw tinned meat and biscuit for next day, and a full ration of corn, and, if possible, hay in nets.

Tell the guard to call the party at 3 A.M.; feed, breakfast, and start at 4 A.M.

Problem 'B.'—What should he do?

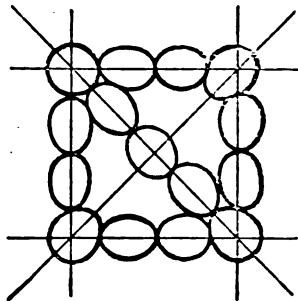
On finding map at fault and hill on other side of river, he should immediately send back to warn the squadron commander, and give the order to take off head ropes, built-up ropes, nosebags, four heel pegs, and mallet; join up all built-up ropes and fix a head rope on to each end. Empty the corn out on to a blanket, and give the corporal instructions to take four men, with all the nosebags, down to the farm west of ford and fill them with hay or straw (hay in preference, being the more buoyant); pack them tight, just so that the mouth can be fastened up; procure from the farm six light spars, 5 feet or 6 feet in length, and any light ropes that he can, and to hurry back.

Pick out the two best swimmers, tell them to find the best place for crossing.

After finding place, and while they are undressing, make a standard of two heel pegs; then throw a mallet and two pegs over to the other side; then send the swimmers over with one end of rope to make a standard and fix the end of the rope on it; then haul the rope taut and fix it on the standard on this side. On the arrival of the corporal with the nosebags, etc., build raft as per diagram, using head ropes, if no other rope procurable. Lash the ends of spars together to make the frame; then lash each nosebag separately, starting at one end, carrying the rope under the bag, bringing it up, and taking two turns round the spar. Care must be taken that the mouth of each bag is placed up. This raft will carry 350 lbs. On completion of the raft, place it in the water, go over with a signaller and his gear, towing the raft over by the fixed rope.

Send one of the swimmers back with raft; then have all remainder ferried over, excepting two men left with horses. Send first two men that cross to reconnoitre hill, and, as soon as they signal all clear, move up on to hill to establish signalling station, and protect it, as well as the ferry, by dismounted fire. The station should be established, roughly, by 6 A.M.

Three horses should then be towed across, and a patrol sent to reconnoitre the farm on the left bank and the country to a distance of four miles in front of the hill.

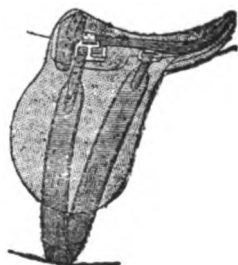


EDITORIAL NOTES

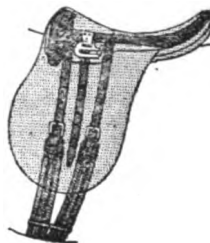
HIS Majesty the King has been graciously pleased to confer the honour of a Knight Commander of the Royal Victorian Order on Lieut.-General R. S. S. Baden-Powell, C.B. The readers of THE CAVALRY JOURNAL will welcome this appreciation by His Majesty of the services of General Baden-Powell, inasmuch as he was the founder of the JOURNAL and has done so much to contribute to its success and value.

We have received from Mons. J. Richard, Saddler, of 11 Rue Vignon, Près la Madeleine, Paris, a saddle fitted with his patent girth attachment, as shown in the accompanying diagrams.

English
Saddle
as girthed
now.



English
Saddle
as formerly
girthed.



This saddle has been tried at the Cavalry School, and opinion is unanimous as to its comfort and stability.

Being widely separated the girths keep the saddle quite steady, and the absence of any pad under the saddle flap brings the rider's grip very close to the horse.

The girths are easily tightened without lifting the saddle flap, and the position of the stirrup leather is well behind the knee, instead of under it as is so frequently the case with the usual saddle.

Fittings for this system of girthing can be obtained from any saddler and applied to any saddle.

The training of the Cavalry Division on Salisbury Plain and the Lambourn Downs has this year been so complete and instructive, that any hurried consideration of its lessons, such as is possible in this number, is inadvisable.

The subject will be fully dealt with in the January issue.

SPORTING NOTES

RACING

THE old-established Bibury Club held their annual meeting at Salisbury in July last, at which large fields and good racing were witnessed. Many soldiers past and present were riding and running horses. The most sensational win of the meeting was brought off by Captain Bingham on Shampoo, in the Members' Welter Plate. In a large field which included Electric Boy, who was fourth in the Derby, any odds were laid against Shampoo, but Captain Bingham brought him up with a rush at the distance and won by five lengths. In the same race Mr. D. McCalmont rode his own horse, Captain Symons, third.

The Dunbar Yeomanry races this year were a great success. Results:

The Novices' Race: Lord Binning's Maryland, ridden by Lord Melgund.

The Tynninghame Hurdles: Mr. F. Hardie's Red Clover (R. Cowe) 1.

The Ladies' Hurdle Race: Mr. Calder's Moonset (owner) 1.

The Belmore Selling Hurdle Plate: Mr. F. G. Storie's Lovekin (Mr. J. C. Storie) 1.

The Dunbar Town Plate: Mr. R. Cowe's Battery Dan (owner) 1.

The Novices' Plate: Mr. Cairne's Firefly (owner) 1.

The Belhaven Consolation Plate: Mr. F. Hardie's Castasegna, (R. Cowe) 1.

The New Zealand Grand National Steeplechase was won by Sir William Russell's Mirador.

POLO

The Subalterns' Cup Tournament at Ranelagh secured an entry of seven teams, but owing to repeated postponements, due to the weather, the Irish Guards, Royal Horse Guards, and 2nd Life Guards scratched.

The semi-final between the 7th Hussars and 16th Lancers resulted in a win for the 7th Hussars by 4 goals to 2. The final between the 1st Life Guards and 7th Hussars resulted in a well-deserved victory for the 1st Life Guards by 6 goals to 1. They played sound polo, hit cleanly, and passed well. Teams—1st Life Guards: Lord Somers, Mr. J. J. Astor, Mr. G. Miller Mundy, and Mr. L. H. Hardy (back); 7th Hussars: Mr. Dermot, H. B. McCalmont, Mr. E. P. Brassey, Mr. A. C. Watson, and the Hon. D. P. Tollemache (back).

On the same day the Royal Artillery, represented by Mr. F. E. Rich, Captain G. Lamont, Captain C. R. Scott, and Captain the Hon. C. H. Stanley (back), defeated a Ranelagh team composed of Mr. E. R. Dawson, Count Sigray, Mr. L. Avery, and Mr. Wilson (back), by 10 goals to 3. The Hon. Hugh Grosvenor umpired both matches.

The 11th Hussars, the winners of the Inter-Regimental Tournament, again distinguished themselves by being in the final for the Champion Cup at Hurlingham. In this match they met Roehampton, and after a good game were defeated by 11 goals to 2. The 11th Hussars were handicapped by having sold some of their best ponies, and had a very powerful team against them. The sides were—Roehampton: Mr. R. N. Grenfell, Captain Herbert Wilson, Mr. A. N. Edwards, Captain J. Hardress Lloyd (back); 11th Hussars: Major T. T. Pitman, Major P. D. Fitzgerald, Captain N. L. Lakin, Captain F. H. Sutton (back). After the match Lady Howick presented the Cup.

Mr. A. Noel Edwards of the 9th Lancers has been added to the Recent Form list. The list this year, issued in January, included thirty names. Since then six additions have been made, viz.—Messrs. H. P. Whitney, J. M. Waterbury, D. Milburn, L. E. Stoddard (the American team of players), H. Rich (who was selected to play for England against America), and A. Noel Edwards.

The seventh annual match between England and Ireland was played as usual in the Phoenix Park, Dublin. This year the name was rightly changed from International Match to the Patriotic Cup. It was witnessed by a huge crowd, but the game was very one-sided and resulted in an easy win for England by 10 goals to 3. The teams were—Ireland: Hon. A. Hastings, Major Browne Clayton, Captain Hardress Lloyd, and Mr. L. M. Ryan (back); England: Mr. H. Rich, Captain H. Wilson, Mr. A. N. Edwards, and Captain C. de Crespigny (back).

The All-Ireland Military Cup secured an entry of four teams, viz. 20th Hussars (A) and (B), 5th Dragoon Guards, and 18th Hussars.

The final between the 20th Hussars (A) and 5th Dragoon Guards resulted in a win for the former by 6 goals to 3. It was a good, fast, galloping game, in which the 5th put up a splendid fight and at half-time were leading by a goal. Players—5th Dragoon Guards: Major W. Winwood, Major L. M. Dunbar, Mr. V. D. S. Williams, and Captain M. A. Black (back); 20th Hussars: Mr. S. Barne, Mr. H. M. Soames, Mr. F. B. Hurndall, and Major H. Romer Lee (back).

The Subalterns' Cup Tournament in Ireland also secured an entry of four teams from the same regiments, the final resulting in a good game between two teams of the 20th Hussars. At the interval there was no score, but thereafter the A team were constantly attacking and finally won by 5 goals to nil. Players: Mr. S. Barne, Mr. G. A. Sandford, Mr. F. B. Hurndall, and Mr. R. H. Osborne (back).

The Hampshire Carabiniers had a most successful invitation tournament on their new ground at Winchester, in which eight teams competed. The final was between the 16th Lancers and Blackmore Vale, the former winning by 9 goals to 4 goals. Players: Mr. E. H. Beddington, Colonel H. de la P. Gough, Captain G. E. Bellville, Captain C. L. K. Campbell.

The Tournament was for the Hursley Challenge Cup, a trophy given by Sir George Hursley, M.F.H., and it was presented to Colonel Gough by

Lady Emma Crichton, wife of Colonel the Hon. H. D. G. Crichton, commanding the Hampshire Carabiniers. The 16th Lancers thus become the first holders of the Cup.

The 16th Lancers have greatly distinguished themselves at Polo this season and have a magnificent player at their head in Colonel H. de la P. Gough, who commands the regiment. Unfortunately, whilst playing with his regiment in August he sustained a terrible fall, and for over a fortnight lay in hospital in a critical condition. All polo players will rejoice to hear that he is now well on his way to a recovery which we hope will be complete.

POLO ABROAD

The Novices' Polo Tournament at Secunderabad was won by the 33rd Light Cavalry, who in the final beat the 29th Lancers by 5 to 2. The winning players were: Mr. Collins, Mr. A. F. Beattie, Mr. P. K. Wyse, and Lieut.-Colonel J. M. Edwards (back).

The South African Polo Association held their annual meeting at Bloemfontein under the Presidentship of Brigadier-General Marling. Mr. F. O. Grenfell, 9th Lancers, was elected Hon. Secretary, with the following committee: Lord Douglas Compton, 9th Lancers; Major Fitzgerald, Headquarter Staff; Captain Bell, 4th Hussars; Captain Watson, 6th Dragoon Guards; Captain Gwyer, Bloemfontein Garrison; Major Brook, 2nd Mounted Infantry; and Mr. Oliver Davis, Durban.

Official measurers were appointed, and it was decided to establish a Recent Form list for South Africa. The Champion Cup Tournament was fixed for the first week in April, 1910, the Inter-Regimental Tournament for May, and the Subalterns' Cup Tournament for June. It was further decided that at least three members from each club should be appointed official umpires for tournaments.

BISLEY RIFLE MEETING

The Jubilee meeting of the National Rifle Association concluded with the presentation of the King's Prize of £250, the N.R.A. gold medal, and the N.R.A. gold badge by Her Royal Highness the Princess of Wales to Corporal H. Burr, of the London Rifle Brigade. The contest for His Majesty's Prize was truly 'Imperial,' for nearly three hundred representatives of India and the Colonies entered the lists, and the men from Canada and the Transvaal showed remarkable form throughout the meeting. The second for the King's Prize was Lance-Corporal T. Hopkins, late 2nd Welsh, and the third Sergeant F. H. Morris, Canada.

The final of the St. George's, open only to Territorials, resulted in a win for Private J. S. Welch, West Kent Yeomanry, who defeated Private J. Reid, 6th Gordon Highlanders, after a tie, and thus carried off the Vase, Dragon Cup, Gold Cross, and £30.

The Roberts Sharp-shooting and Rapid-firing Competition was won by H.M.S. *Pembroke*, the second being the 2nd Royal Warwick Regiment, and third 1st Coldstream Guards.

The Stewards' was secured by Lieut.-Colonel Murray Smith, Natal.

The Yeomanry Inter-Regimental Challenge Cup was won by the Gloucestershire, with the Essex second, and the East Riding of York third.

The Lloyd-Lindsay Competition for Cavalry resulted as follows : 5th Lancers, winners of £50 ; 16th Lancers (2nd team), winners of £30 ; 2nd Life Guards, winners of £10.

The Royal Cambridge Shield for Cavalry also fell to the 5th Lancers.

H.R.H. the Prince of Wales concluded the meeting with a capital speech, and H.R.H. the Princess of Wales graciously distributed the prizes.

GOLF

Captain G. H. C. Wilkins, R.G.A., won the South African Golf Championship at Potchefstroom.

ATHLETICS

The All-Ireland Athletic Meeting was a great success, the entries exceeding those of last year, and excellent times were accomplished. Some of the results were as follows :—

Officers

100 yards : Lieutenant A. V. Holt, 1st Black Watch.

1 mile : Lieutenant G. C. Benstead, 2nd Essex Regiment.

Jumping (troop horses barred) : Major A. B. Bayley, 118th Battery, R.F.A.

Warrant Officers, N.C.O.s, and men.

Three miles : Lance-Sergeant O'Neill, 2nd Connaught Rangers.

High Jump : Trumpeter Bennett, South Irish Horse, 5 feet 4 inches.

Long Jump : Trumpeter Bennett, South Irish Horse, 20 feet 6 inches.

Tent Pegging (Sections) : B Squadron, 20th Hussars.

Quarter Mile for Irish Army Challenge Cup : Corporal Stroud, 1st Royal Berks.

At the conclusion Major-General W. P. Campbell, C.B., congratulated the prize winners, and the Hon. Lady Lyttelton distributed the prizes.

The 11th Hussars and the 16th Lancers both held capital sports at Aldershot. At the latter there were some fine displays of horsemanship. In the V.C. race quite a score of horsemen participated and carried off 'wounded' men at full gallop over jumps and under fire. The Officers' Tent Pegging, open to the Aldershot command, was won by Lieutenant Andrews, 7th Hussars, and the Section Jumping by the 16th Lancers.

Army Athletic Meeting.—The thirtieth annual meeting was held at Aldershot. Entries were below those of last year, but the championship events brought an increased entry. Results (Championship Events) :—

One Mile Relay Race : 2nd Lincolnshire Regiment (holders).

One Mile : Lance-Sergeant A. Sleet, 2nd Northamptonshire Regiment.

Half Mile : 2nd Lieutenant A. Patterson, 27th Battery, R.F.A. (holder).

Quarter Mile : 2nd Lieutenant A. Patterson, 27th Battery, R.F.A.

120 Yards Hurdles : Captain R. G. Painton, R.A.M.C.

100 Yards : Lance-Sergeant Graves, 1st Royal Berkshire Regiment.

At the conclusion Lady Smith-Dorrien presented the prizes.

The Irish Guards gave their annual regatta and aquatic sports at the Eton College Bathing Place on the Thames, in which a lengthy programme was successfully carried through, under the presidentship of Lieut.-Colonel Fitzclarence, V.C.

FOOTBALL

In the South African Army Football Cup Final played at Pretoria, the Argyll and Sutherland Highlanders (holders) defeated the Hampshires by 2 goals to 1. Lord Methuen presented the cup.

INTERNATIONAL HORSE SHOWS

By MAJOR F. R. LAWRENCE, D.S.O., 14th (King's) Hussars

Since the first article on this subject appeared in *THE CAVALRY JOURNAL* of October 1908, suggesting that a preliminary jumping competition should be held at the Royal Naval and Military Tournament, 1909, great progress has been made in the movement.

At the International Horse Show in 1908 some eleven horses only were entered by British officers, whereas at the Show this year seventy competed.

This result was largely due to the fact that the King's Cup Competition was started this year for teams of three officers from each nation, and the Connaught Cup Competition for British officers, in which no fewer than sixty-three horses competed.

The Army Council early in the year notified by a circular letter that they were anxious for officers to compete at International Horse Shows, both at home and abroad, and the Committee of the Royal Naval and Military Tournament immediately seized the opportunity to institute a special competition to be held daily throughout the Tournament over a course similar to that used at the International Horse Show.

A similar competition will be held again in 1910 as a preliminary to the International Horse Show events, for which probably no officer will be allowed to enter who has not first proved his efficiency at the Royal Naval and Military Tournament.

Looking at the general results this year, it is to be noted that two officers—Lieuts. Hetherington and Lawrence, 18th Hussars—attended the International Horse Show at Brussels, where they did exceedingly well, and were most cordially received. One officer—Lieut. Worthington, 3rd Dragoon Guards—attended the Horse Show at The Hague, where in six appearances in the ring he took five prizes.

At Olympia this year British officers took seven first prizes, two second, five third, two fourth, one fifth, seventh, eleventh, twelfth, thirteenth, and fourteenth, three reserve prizes, and eight commended. These do not include the Connaught Cup Competition, which was restricted to British officers, nor do they include the many prizes gained by our Canadian brother-officers.

The three British officers representing the nation in the King's Cup Competition, viz.—

Lieut. G. Brooke, 16th Lancers,
Lieut. M. Graham, 16th Lancers,
Second-Lieut. Worthington, 3rd Dragoon Guards,

were a good third out of six teams, the French and Italian teams being first and second.

It should be remembered that besides the jumping competitions there are at the Horse Shows numerous classes for polo ponies, riding horses over and under 15.1, covert hacks, hacks in regular use, chargers (light weight and heavy), qualified hunters up to and over 14 stone, with varying conditions as to age, besides championship competitions in each of the different classes. However, the jumping competitions appeal perhaps most to British officers, and what must be aimed at next year is the winning of the King's Cup Competition.

If we are to have any chance of doing this, it is necessary to start training horses at once. The committee presided over by the Inspector-General of the Forces has recommended that three horses per Cavalry regiment out of the establishment of horses in a regiment should be kept for these jumping competitions, and in the same way the Cavalry School and the Riding Establishment R.A. should also keep horses specially for this purpose. It is further suggested that at the Royal Naval and Military Tournament, besides the jumping competition initiated this year, there should be one for teams of three officers per regiment, brigade of Artillery, Cavalry School, and Riding Establishment R.A. It is not intended that officers should give up their hunting or polo for these competitions, but there is time for all three, and the fact of being able to train horses successfully for show jumping is a decided test of horsemanship and horse-mastership.

It is quite useless to attempt to compete either at the Tournament or still more so at the Horse Show on any but well and carefully trained horses, and it would certainly be advisable to hold preliminary competitions in the different commands.

At the International Horse Show this year the tendency of our competitors was to go too fast at the fences. It was also noticed that even those who did best frequently just touched a jump, owing to their looking round when jumping to see if they had cleared it, and thus making their horses lose their balance.

Horses must be trained to clear a flimsy artificial obstacle in such difficult surroundings as a tan-floored and artificially lighted hall, surrounded by cheering spectators and with a band playing. They must also be made familiar with artificial banks.

The rider should be light, and should learn the peculiar seat of the show ring as opposed to the hunting seat; it is best learned without either stirrups or reins.

For the Horse Show at Brussels special training is required, as the military competitions there include a ride in the country for a number of miles in a certain time as well as jumping.

Last month six officers, viz.—

Major Hon. J. G. H. H. Beresford, D.S.O., 7th Hussars,
Lieut. Yorke, Riding Establishment R.A.,
Lieut. W. Neilson, 4th Hussars,
Lieut. Walwyn, R.F.A.,
Lieut. Stokes, 4th Hussars,
Second-Lieut. Hetherington, 18th Hussars,

taking ten horses with them, attended the International Horse Show at San Sebastian, where the King of Spain gave a cup for competition for teams of five officers from each nation. The result of this competition has not yet been received.

In 1910 there are the following International Horse Shows, besides the one at Olympia from June 4 to 14, and the Richmond Horse Show immediately after it:

Rome in April,
Brussels in May,
The Hague in July,
San Sebastian in September.

In addition to these there are some other smaller ones.

The Royal Naval and Military Tournament, 1910, will probably be from May 12 to 28.

A SPORTING REMINISCENCE

By P. H.

THE following true facts are thus narrated by one of the participants:

Arma virumque cano, which does not mean what the Yale student at the time of the tinned-meat scandals interpreted it to mean, 'canned goods and poison for the dog,' but means that a sportsman of no literary ability will endeavour to describe a day's sport in the Shiny.

I will not weary my readers with a description of the particular part of the East in which I found myself; suffice that on this occasion, by the courtesy of a native Prince, a party of about eight of us were allowed for a month to hunt on his land, and the place turned out a perfect elysium for the sport. Before narrating our special day I will give those who have not had the luck to participate some idea of the respective ways hog and leopard are hunted.

The former is pretty well familiar to everyone, either from experience or from what they have read. The pig is found and off you go after him. The leading man, when he is near the pig, takes a slight pull, not enough to let anyone else up, but enough to get his horse's legs under him preparatory to the quick jink to one side or the other, or to the quicker and more disconcerting charge of the pig, who will endeavour to cut the horse, and, if it is a red-letter day for him, to upset horse and rider, and, if possible, break both their necks. Well, our sportsman has survived the jink and gets within spearing distance. The expert spears the pig behind the shoulder, and, if he is lucky and a real artist, ends the run, as a spear well directed goes home like into a pat of butter. On the other hand, the novice comes along and sees a very good target, somewhat nearer than the shoulder, and with the result that the spear hits the pig on the quarter and turns his bows into the horse, and then, whether a cut horse or an overturned sportsman, is in the lap of the gods. The pursuit of the leopard is somewhat different. Everyone has a dart for first spear, of course, but after that the *modus operandi* is somewhat as follows: An extraordinary fast beast for a short distance, the leopard soon gets blown, is caught, and someone spears him. If he has been leopard-spearing pretty often, the sportsman takes care to be going top speed, and after he has delivered the spear to keep it up, as the leopard as a rule gets quite

peevish and flies after his foe. We have now got to where the leopard has received the first spear. It should be noted that he is a very difficult beast to spear, as he has a very flexible hide and it is hard to penetrate to the flesh, as the skin seems to turn round. The moment the spear is delivered our sportsman rides on, pursued by the leopard; the latter is meanwhile being closely followed by the next rider, and so on till the end. An amusing interlude is sometimes caused by the leopard hiding in the long grass; they have the faculty of always appearing the same colour as their surroundings, and it is extremely hard, even with a compass, to discover which is the north and which the south of the beast. Unlike Nansen, the last part of the leopard the perspiring sportsman wants to find is the north; he wants the south, and personally I always found that the best way to find it was to procure native help, as the native beaters see about twice as far as any European. The points of the animal's compass having been adjusted, the sportsmen get one behind the other, and they then indulge in a little practice for the tent-pegging at the animal assault-at-arms of their respective stations, the only difference being that, instead of waiting for the usual applause from fair women and brave men, they seem oppressed with modesty, and hurry on as if nothing had happened. Fortunately, perhaps, the leopard has little of the courage of the pig; if he had I am sure we should be content either to let him alone or to shoot him.

One morning we all started out of camp in good spirits as the head beater said that there were any number of pig and some leopard. Sure enough we were soon all busy, each one of us going after his own pig. One of our number while pursuing a pig came across a leopard; his gallant soul never thought that it was perhaps a rash thing to take on a leopard alone; anyway he left the pig and went after the leopard, followed by his soldier servant (a driver in the Artillery), who carried his master's rifle in case we met buck on our way home. The pursuit was normal for some time, as, only having one man after her, the leopard did not hurry too much, but after a bit got to ground in a culvert running under a path. Our gallant friend then committed his first indiscretion; he got off his horse, gave it to his servant, and, armed with the rifle, went to the mouth of the culvert and invited the leopard to come forth and be slain. Now the leopard, though with no instincts of the Bayard when pursued by men on what he no doubt takes to be things as big as haystacks, getting the notion that, after all, there is a little even money going about the affair, and noticing no doubt that his foe was on foot, and though ugly not so very big, having recovered breath, left her shelter with a rush and a roar not unlike a S.E. express leaving a tunnel, only perhaps a bit quicker. Our gallant friend, though indiscreet, was no fool, and had got his rifle about as high as his waist ready; he never had a chance to get it higher, but had enough *savoir vivre* to pull the trigger; afterwards it was found that this had broken one of the leopard's legs. The leopard on its way out tapped the man on his hat and laid him out, took a little nibble at him—just, I suppose, to know him again—and then went on to arrange, I believe, a little business on which she was engaged when first sighted by the ardent sportsman, viz. to see about a wet nurse for a purely domestic event which was imminent. Had our sportsman lain still all would have been well, but, unfortunately, more active counsels prevailed, and he arose, if possible, to increase the distance between his sore head and the beast who had behaved so unsympathetically. Our female acquaintance, with the

playful ways of the true ladies of her sex, took a peep round and saw what had happened, and, seeing, felt offended that anyone should appear to wish to leave her so suddenly, and thought she would go and have another nibble. The thought, the deed, and the sportsman once more on the floor were all three practically instantaneous, and this time, no doubt, the leopard would have had more than a nibble. Fortunately for him, one of the party, having lost his pig, was riding back to find the beaters, heard the howls of the sportsman, and galloped up to see what it was all about. By this time the leopardess was more than peevish, in fact was decidedly grumpy, and, on the generally accepted axiom of a female alone with a male being company and three a crowd, went for the new arrival with open mouth. Now this chanced to be a brilliant beginner, and though undoubtedly of exceptional valour in what is generally accepted as the traditional positions of pursuer and pursued, yet with the leopard, so to speak, in the title-rôle he felt like giving the whole thing a miss in baulk. He certainly would have refused an encore. However, the stage management was taken out of his hands and he did what was the only possible thing—pulled his horse up and waited. I suppose the animal thought it had taken the wrong turn and got into the Zoo, anyhow he took it all as a matter of course and stood like an image. The beginner 'prepared to receive Cavalry,' lowered the point of his spear and caught our female friend through the tough skin over her shoulder. The point of his spear went into the ground, and at the close of Act 2 the first sportsman might be seen lying more or less oblivious on the ground, the second sportsman and the lady having no end of fun in the middle of the stage, with the lady endeavouring to bite through the shaft of the spear. For a moment we must glance back at Act 1, where we left the first sportsman's servant holding his horse. These horses bolted at the first shot, but the man stopped them and came back to participate in Act 3, and incidentally to help in ringing down the curtain, and about time, too, said the first sportsman. Attracted by the shouts of the beginner, who was thinking whether he should shortly feel anything like poor Jonah, who had the rough up with a whale, he flew to the rescue, and as he passed his master, who had by this time recovered enough to be using fearful language, he got hold of the rifle. He carried a belt of cartridges, and drew near the star performers. The beginner says that if he had not been in such a beastly funk he would have enjoyed the show more. The servant, though a very plucky chap, was an Artillery driver, and not much used to weapons more lethal than a whip; therefore, I suppose, he could not instinctively do the right thing; which was to place a cartridge in the breach, lock it, and fire it at the lady. He got very flurried, and though obviously trying to please, I suppose his mind went back to the dark ages, when they put bullets down the muzzle. Anyway, the beginner, who was perhaps justifiably too excited to be perhaps an altogether trusty raconteur, swears he tried to put the cartridge into every part of the rifle, including the butt, except the breach; however, the best of good things end, and finally the excited warrior performed the operation, put the muzzle to the lady's head, and pulled down the curtain.

For all except the first sportsman the fun was now over, and things resumed their normal course. Being the youngest, I suppose, and obviously (as a new arrival in India) being entirely without even that smattering of medical knowledge common to all old shikaris, I was unanimously selected as the proper

person to take the first sportsman back to camp and doctor him ; so the servant and I escorted him back. He was just able to ride. On reaching camp we took him to his tent, undressed him, and then retired to read 'Every Man His Own Doctor,' or words to that effect: the able writer had evidently never had a round with a wild beast. While the servant and I were poring over the book, and had finally almost decided to treat him for hydrophobia, another European servant came in and said that his master had a fine cure for wounds, sore backs, etc.—phenyl. I sent for the bottle and had wit enough to smell it. I thought it smelt a bit pungent and mildly suggested diluting it, but the most the soldiers would allow was to have that standard of all Tommy libations 'alf and 'alf,' which would correspond to the civilian 'Not all the soda, please, Miss.' I thought there might be trouble, so summoned everyone in camp, and proceeded to the sportsman's tent, and then and there proceeded to carry out antiseptic precautions. The doctor who afterwards saw him said that the effect on open wounds would be much the same as treating them with a hot poker, and from the absurd fuss the man made I could almost believe it; he hardly ever repeated himself, but his language would have made a Billingsgate fishman just run and hide. However, with eight men holding him I made a very complete job and let him off nothing. One wound caused us the most anxiety, a claw mark above one nipple of his heart and another just under, and when we pressed one the blood came out of the other, and *vice versa*. I remember this Box and Cox business frightened me, and when we packed him into a cart I thought he would be a 'goner'; but in spite of having to drive twenty miles to the nearest station, and then go four hours by rail during awful heat, this hearty sportsman did very well and actually rejoined us three weeks later and arrived on the scene as we were killing our one-hundredth pig. I may say, in case I ever want a medical diploma, that the doctor said also that any less drastic treatment would have probably failed to prevent blood poisoning or erysipelas, but, as it was, a fortnight's cold weather in the hills put everything right.

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IMPORTANT

The Staff of the Journal is very limited, and it is therefore necessary for all officers who obtain the Journal direct from the Managing Editor to report any alteration of rank or address immediately, as it is quite impossible to follow up the stations of individual officers: every effort will, however, be made to trace the moves of regiments.

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